# Private Health Sector Review 2012



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#### **Private Health Sector Review 2012**

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### Abbreviations

ATC	Anatomical Therapeutic Chemical
СТ	Computed Tomography
DDD	Defined Daily Dose
ESR	Erythrocyte Sedimentation Rate
FBS	Fasting Blood Sugar
FBC	Full blood count
HSDP-2	Second Health Sector Development Program
IBSL	Insurance Board of Sri Lanka
IHP	Institute for Health Policy
IMS	Intercontinental Marketing Services.
MoH	Ministry of Health
MRI	Magnetic Resonance Imaging
MSD	Medical Supplies Division
NHDP	National Health Development Plan
OECD	Organization for Economic Co-operation and Development
PDHS	Provincial Director of Health Services
PDoHS	Provincial Department of Health Services
PHNHs	Private Hospital and Nursing Homes
PHSRC	Private Health Services Regulatory Council
PMIRA	Private Medical Institutions (Registration) Act
SLHA	Sri Lanka Health Accounts Database
THE	Total Health Expenditure

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### **Executive Summary**

Private healthcare financing contributes just over half (52–54%) of all healthcare expenditures in Sri Lanka. Although its share has fluctuated from year to year (49–57%), it has remained largely stable during the past two decades. This stability in shares is somewhat contrary to the expectations of the 2000 World Bank health sector assessment by Hsiao and others. Private spending has grown in absolute terms, but public spending has over the longer term kept pace.

The bulk of private spending is direct spending by households. Private insurance contributes about 5% of total private financing, with the private insurance market showing considerable growth in recent years. By 2011, 16 firms were offering private medical insurance, both as a standalone product, and as a rider in life insurance policies. Total insurance premia for medical coverage reached Rs. 7.5 billion in 2011, with claims spending of Rs 4.0 billion. The private insurance market is largely a group market, with only individual policies representing only 4% of the non-life sales.

Private spending is mainly used to pay private hospitals, doctors and laboratories, and to purchase medicines from pharmacies. Private hospital provision has shown robust growth during 1990–2011, increasing more than 120% to reach an estimated 4.210 beds, 266,000 discharges and revenues of Rs 19 billion in 2011. However, public sector provision increased at an equal pace, and the private sector share of discharges increased only from 3.9% to 4.6% in this period. This growth is concentrated in the Western Province, with private hospital provision in the Western Province accounting for 65% of all private beds and 88% of all private hospital revenues in 2011. There has been accompanied by increase in the technologies available at private hospitals, and a shift in the private sector from smaller to larger (100+ beds) facilities. Estimates of activity in the private laboratory and imaging markets are less robust. Overall revenues by these providers were about Rs. 7 billion in 2011, with an estimated 750 facilities providing such services, of which about 100–150 provided imaging services.

Reasonably robust data are available on trends in the supply of medicines in Sri Lanka, owing to the centralized procurement of medicines in the public sector, and the coverage of pharmacy sales by IMS-Health. Most of the private sector supply is by pharmacies, which distribute medicines directly to outpatients, as well as inpatients in private hospitals and indirectly to outpatients via sales to dispensing doctors. The private sector accounted for 76% of the total supply in value terms, or Rs 10 billion (at retail prices) in 2009. However, this represented only 52% of the supply in volume terms, as the public sector procures medicines much more cheaply than the private sector.

In terms of provision, the private sector accounts for about half of all outpatient contacts, and about 5% of inpatient discharges. Utilization of these services shows clear gradients by income level. Poorer households rely more on public services, and richer households rely more on private services, but overall volumes of utilization are similar across the income levels. This pattern of use, where increased use of public services by the poor compensates for higher use of private services by the rich, is unusual in a regional context, but resembles the pattern seen in Malaysia and Hong Kong SAR.

The overall public-private mix in the health sector is also remarkably similar to that in Malaysia and Hong Kong SAR. This is not only in the socioeconomic differences in utilization, but also in the private shares in provision and financing, and overall trends. This

profile suggests that strategic policy making in Sri Lanka would benefit most from monitoring and learning from the experiences of these other two health systems, and strengthening links with policy-makers in those economies.

In 2006, Sri Lanka engaged in a bold experiment to change the regulation of private sector services, by moving responsibilities to an independent Private Health Services Regulatory Council (PHSRC). The system is unique in a regional context as it moves regulation out of the health ministry, and directly involves the private sector providers in the regulatory agency. Assessment of the PHSRC shows that it is completely ineffective, failing to discharge most of its envisaged functions. The one function it does attempt is the annual licensing of private medical providers, but analysis shows that it does this badly, with most private hospitals failing to obtain their annual license, and an even greater proportion of other providers also not doing so. PHSRC licensing performance is actually deteriorating over time, with some evidence pointing to conflicts of interest between those of the private sector representatives and the PHSRC's regulatory objectives playing a part. It is recommended that the PHSRC be abolished, and private sector regulation be transferred back to MoH, as in other similar countries such as Malaysia and Singapore.

This profile was prompted by concerns that there was inadequate information on the activities of private healthcare providers in Sri Lanka. Although only limited primary data collection was done, it was possible to build up a fairly detailed profile of private healthcare activities in the country, and recent trends. It is possible to profile private sector activity in Sri Lanka in greater detail than in most other regional countries, by making use of data collected outside MoH. This is despite the inability of the PHSRC to provide reliable statistics on private sector activities. The findings indicate that MoH can improve its monitoring of the private sector health contribution by strengthening partnerships with other agencies in the country, although restructuring the private sector regulatory mechanisms would also make a big difference.

### 1. Introduction

#### **Background of the study**

The Ministry of Health (MoH) is preparing a National Health Development Plan (NHDP) - with a five-year rolling budget – using a broad-based participatory process, and covering both central and provincial level activities. The World Bank agreed to support the NHDP through development of the Second Health Sector Development Program (HSDP-2), with the intention of focusing engagement in the areas of nutrition, non-communicable diseases, and selected systemic issues. The selected systemic issues include:

- a) Improved planning and management of physical infrastructure.
- b) Modernized health information system.
- c) An effective health care quality assurance system.
- d) More efficient and equitable health financing mechanism.
- e) More productive engagement with the private sector.

Private institutions and providers play an important role in the healthcare sector of Sri Lanka, complementing the activities of government healthcare institutions. The issues(d) and (e) noted above required a better understanding of how the private sector is engaging in health service delivery and financing. To address this, the World Bank tasked the consultants (Institute for Health Policy) with conducting an assessment of the private health sector activities in Sri Lanka. This assessment had the specific objectives of:

- (i) Profiling the extent of private sector activities in the areas of hospitals, laboratory and imaging services, medicines and private health insurance, and
- (ii) Assessing the system of regulation of private providers.

This report presents the findings of the assessment, starting first with a profile of private sector activities in the focus areas. This is organized by type of service. These sections are then followed by an assessment of the regulatory system.

### 2. Private Hospital Services

#### **Definitions**

For the purposes of this assessment, private hospitals and nursing homes are defined as nongovernment establishments that routinely admit patients for an overnight stay. This definition is consistent with widely used international classifications, such as used by Organisation for Economic Co-operation and Development (OECD) and Eurostat. However, we exclude the activities of the non-government estate hospitals that provide services to the estate population, and which are managed by the Plantation Human Development Trust (PHDT), as these have quasi-public characteristics, and are subject to an on-going process of integration with MoH services.

It is noted that this definition does not require an institution to have registered or been licensed as a private medical institution with MoH.

#### **Methodology**

#### Listing of private hospitals

For reasons discussed later, MoH does not have a comprehensive or reliable listing of private hospitals in the country, nor is there any other such listing in the public domain. There is also no routine reporting of any statistics by private hospitals to MoH or any other government agency. Consequently, any profiling of private hospital services requires the use of surveys to collect data.

To develop the estimates reported here, IHP undertook in 2012 its regular survey of private hospitals. IHP has compiled and updated on a regular basis a listing of private sector institutions that have provided or may have provided inpatient services in the period since 1990. This listing was initially developed by Dr Rannan-Eliya in 1989 and then successively expanded and updated by gathering information from a variety of sources. These have included listings of institutions maintained by pharmaceutical companies and other industry sources, directories of private healthcare institutions that have sometimes been published by private agencies, articles published in the print and electronic media, and the telephone directory. Repeated efforts have been made to verify the listings by contacting the identified establishments by telephone, by mail and in person, to ascertain their existence and functioning as inpatient institutions. Field visits have been made also at various times to most districts in the country to validate the listings for each area, and to check with local informants as to the accuracy and comprehensiveness of the listings.

For the 2012 survey, the existing IHP listing was updated by making use of the list of private medical institutions that had ever registered as private hospitals with the Ministry of Health as at January 2012, as per the requirements of the Private Medical Institutions (Registration) Act, No. 21 of 2006(Government of Sri Lanka 2006). All the institutions that were in the MoH registration list were contacted and their status verified. It was found that many of these institutions were not in fact inpatient institutions. Only 23 institutions were identified that were not already in the IHP listing, which were accordingly updated.

#### Survey of co-operative and private hospitals in Sri Lanka 2012

Once the national listing was finalized, a mail survey was conducted of all identified institutions. This collected basic information on physical infrastructure, human resources, patient services and financial turnover. To increase the overall response rate, non-responding institutions were followed up by repeated mailings, phone calls, and in certain districts by field visits.

Of a total of 144 establishments that were surveyed, 10 were found to be operating only as outpatient facilities. Another six were not contactable and were likely to have closed down. This left a total of 128 establishments, potentially providing inpatient services. From these, responses were obtained from 95 (75%).

Following data entry, the collected data were screened for potential errors and inconsistencies, and where necessary responding hospitals were contacted again for clarifications. The data from the 2012 survey were then combined with the data in IHP's existing database to estimate overall private hospital activities since 1990. This analysis involved imputing for non-responses, incomplete data and responses deemed to be implausible. Imputation was also done to estimate activities of any hospitals, which might have existed, but had not been identified in IHP's database. This involved estimations of the extent of incompleteness in the coverage of the database.

#### **Findings**

#### Beds and utilisation

• It is estimated that a total of 125 institutions, with approximately 4,200 beds,operated as private hospitals in Sri Lanka in 2011. These hospitals delivered approximately 266,000 inpatient admissions and 4.7 million outpatient visits per year (The number of admissions per private hospital bedper year increased from 50 (1990) to 55 (2009) (Figure 3). This was a smaller increase compared to the government hospitals, where admissions per hospital bed increased from around 50 in 1990 to nearly 80 in 2009.

Table 1).

• The number of private hospitals increased from approximately 66 to 125 between 1990 and 2011, and the total number of private hospital beds available increased from an estimated 2,000 in 1990 to 4,200 in 2011 (The number of admissions per private hospital bedper year increased from 50 (1990) to 55 (2009) (Figure 3). This was a smaller increase compared to the government hospitals, where admissions per hospital bed increased from around 50 in 1990 to nearly 80 in 2009.

Table 1). In contrast, MoH andProvincial Departments of Health (PDoHs) operated approximately 69,500 beds in 2009, as reported by theMoH Information Unit.

• In the private sector, total inpatient admissions increased from approximately 100,000 to 266,000, whilst outpatient numbers increased around four-fold from 1.1 million to 4.7 million during 1990–2011. This compares with 5.5 million admissions and 48.8 million

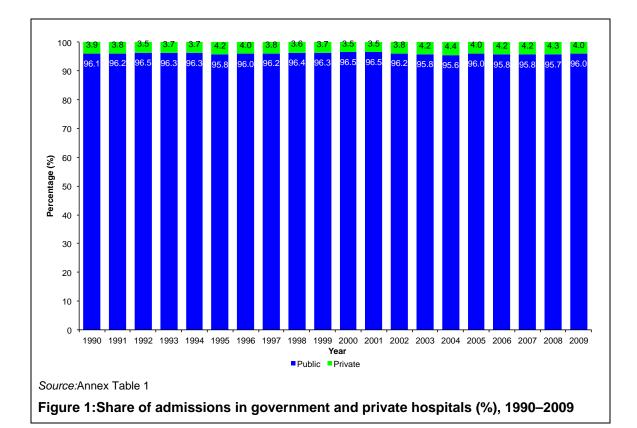
outpatient visits at MoH and PDoH institutions in 2009, the latest year reported by the MoH Medical Statistics Unit.

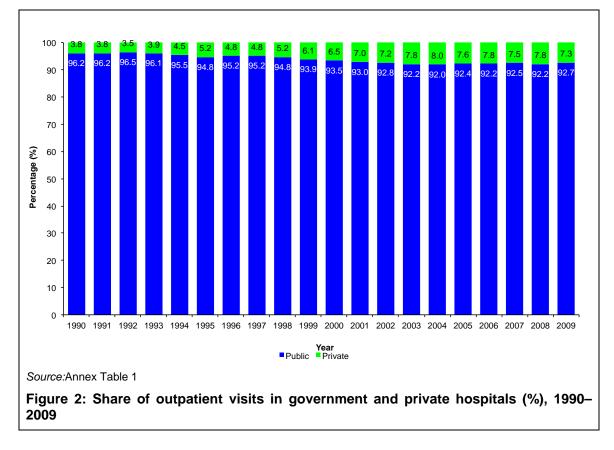
- Out of the total inpatient admissions in the country, one in 25 admissions were in the private sector (4%) and every one in 14 outpatient visits to a hospital were to a private sector hospital (8%) in 2009.
- Private hospital beds represent6% of the total hospital beds in the country in 2009.
- The share of private sector admissions among all hospital admissions in the country has remained at around 4% from 1990 to 2009 (Figure 1). The share of private sector outpatient visits among all hospital outpatient visits has increased from 4% in 1990 to 7% in 2009 (Figure 2).
- The number of admissions per private hospital bedper year increased from 50 (1990) to 55 (2009) (Figure 3). This was a smaller increase compared to the government hospitals, where admissions per hospital bed increased from around 50 in 1990 to nearly 80 in 2009.

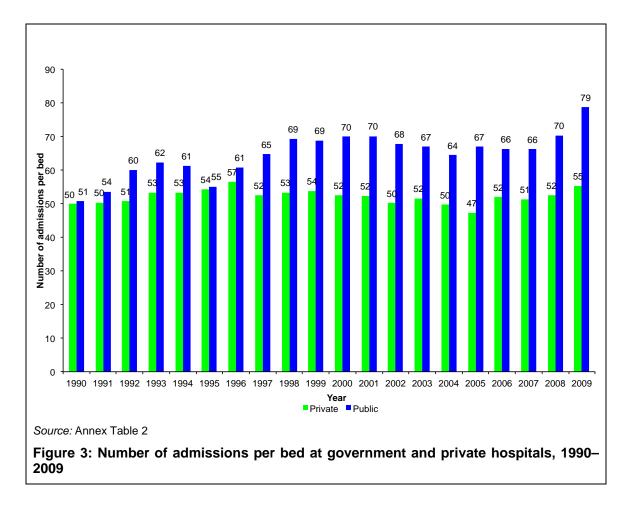
Year	Private Hospitals	Beds	Admissions	Outpatient visits
1990	66	2,004	100,200	1,115,000
1991	66	2,080	104,700	1,146,000
1992	68	2,195	111,200	1,322,000
1993	70	2,275	121,400	1,501,000
1994	71	2,322	124,000	1,630,000
1995	72	2,396	129,800	1,758,000
1996	74	2,490	140,800	1,871,000
1997	79	2,629	137,800	1,979,000
1998	80	2,645	141,000	2,248,000
1999	83	2,706	145,600	2,667,000
2000	83	2,764	145,100	2,997,000
2001	86	2,823	147,900	3,289,000
2002	88	3,199	160,500	3,544,000
2003	90	3,383	174,400	3,702,000
2004	103	3,696	183,600	3,604,000
2005	106	3,788	179,200	3,490,000
2006	108	3,810	197,800	3,482,000
2007	108	3,955	203,100	3,473,000
2008	119	4,198	220,400	3,856,000
2009	123	4,133	228,300	3,835,000
2010	124	4,106	257,900	4,372,000
2011	125	4,210	266,000	4,742,000

### Table 1: Number of private hospitals, beds, admissions and outpatient visits, 1990–2011

Source: IHP Private Hospitals and Nursing Homes (PHNHs) database 2012







#### **Revenue and capital expenditure**

The estimated total revenue of private hospitals in 2011 was Rs. 19.3billion, compared to Rs. 0.43 billion in 1990 (Table 2). The capital expenditure of private hospitals in 2011 stood at Rs. 3.1 billion, which was equivalent to 16% of the revenue for that year.

Year	Revenue	Capital Expenditure
1990	426	77
1991	511	93
1992	612	109
1993	743	131
1994	862	149
1995	1,048	184
1996	1,247	221
1997	1,544	261
1998	1,844	302
1999	2,237	353
2000	2,662	499
2001	3,172	505
2002	4,426	1,626
2003	5,264	2,016
2004	6,540	1,207
2005	8,379	1,250
2006	9,212	1,220
2007	10,825	1,175
2008	14,172	1,938
2009	14,796	2,647
2010	17,040	2,162
2011	19,292	3,076

Table 2: Revenue and capital expenditure of private hospitals (Rs. million),1990–2011

#### **Geographical distribution**

The distribution of private hospital services is highly concentrated in Colombo and the Western Province. This concentration has increased over time, as illustrated inFigure 4: Geographical distribution of private hospitals, 1990–2012 and geographical distribution beds, 2012.

- In 2011, the majority of private hospitals were in the Western Province (51%), followed by the North Western Province (9%) (Table 3). Half of all private hospitals have been consistently located in the Western Province throughout 1990–2011.
- The distribution of private hospital beds is even more highly concentrated in the Western Province, which accounts for two-thirds of all beds in the country for 2011 (Table 4). The next largest share of beds was in the Central Province (9%). Eastern, Sabaragamuwa and UvaProvinces accounted for the lowest shares of private hospital beds.
- The concentration of beds has increased over time. The Western Province accounted for approximately 54% of the total private hospital beds in 1990, has increased to 65% in 2011 (Table 4).
- The bulk of admissions took place at private hospitals in the Western Province (73%) in 2011, which is an increase from 59% in 1990. The next large admissions in 2011 were in the Central (8%), Southern (7%) and the North Western Province (4%) respectively (Table 5).

- The largest share of outpatient visits in 2011 was in the Western Province (63%), followed by the Southern Province (16%). The lowest shares of outpatient visits werein the Eastern, North-Central and Uva Provinces, where the cumulative total was only3% (Table 6).
- Throughout the period 1990–2011, the Western Province accounted for the largest share of private hospital revenues (80% to 88%) (Table 7). In 2011, the next large shares of revenue were in the Central and the Southern Provinces.
- Table 8 depicts the capital expenditure over the period 1990–2011, where the Western province has had the largest share of expenditure over the period. Total capital expenditure for 2011 is estimated at Rs 3,100 million.

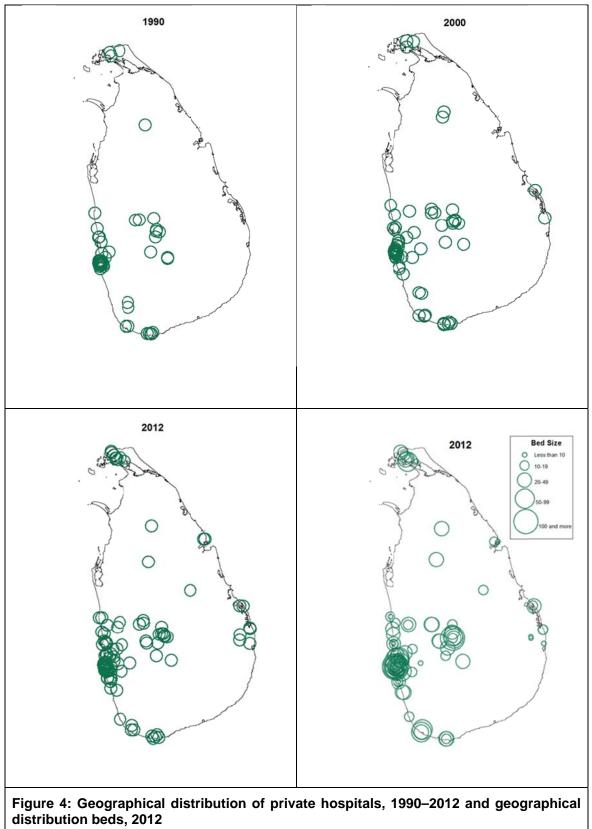
	Share of private hospitals by province (%)									Total
Year	Wester n	Central	Souther n	Norther n	Eastern	North Western	North Central	Uva	Sabaraga muwa	number of hospitals
1990	49	14	13	5	2	11	0	3	4	66
1991	50	13	13	4	2	11	0	3	3	66
1992	52	13	12	5	2	10	0	3	3	68
1993	53	12	12	5	2	11	0	2	3	70
1994	55	11	12	5	1	11	0	2	3	71
1995	55	10	13	4	1	11	0	2	3	72
1996	54	10	12	6	1	12	0	2	3	74
1997	55	9	11	5	1	11	0	3	4	79
1998	56	9	11	5	1	11	0	3	4	80
1999	58	8	10	5	2	10	0	3	4	83
2000	56	8	11	5	3	10	0	3	4	83
2001	55	9	11	6	3	10	0	3	4	86
2002	54	9	10	8	4	10	0	3	4	88
2003	52	9	10	6	4	10	0	5	3	90
2004	49	11	9	7	4	10	1	5	4	103
2005	49	11	8	6	5	12	1	5	3	106
2006	48	9	9	7	6	11	1	5	3	108
2007	51	9	9	7	5	11	1	4	3	108
2008	52	9	8	8	6	10	1	4	3	119
2009	52	8	9	8	6	10	1	3	3	123
2010	52	8	8	8	8	9	1	3	2	124
2011	51	8	8	8	8	9	2	3	2	125

#### Table 3: Provincial distribution of private hospitals (%), 1990–2011

Share of beds								
Year	Western	Central	Southern	Northern	North Western	Sabaraga muwa	EP, NCP and Uva	Total number of beds
1990	54	13	16	1	13	1	2	2,004
1991	56	13	15	1	12	1	2	2,080
1992	58	12	14	1	12	1	2	2,195
1993	59	12	13	1	13	1	1	2,275
1994	61	11	12	1	12	1	1	2,322
1995	61	10	13	1	12	1	1	2,396
1996	61	10	12	3	12	1	1	2,490
1997	60	10	11	3	11	2	2	2,629
1998	62	10	10	3	11	2	2	2,645
1999	63	9	10	3	10	2	3	2,706
2000	64	9	9	3	9	2	4	2,764
2001	63	9	8	5	9	2	3	2,823
2002	67	9	7	5	8	2	3	3,199
2003	67	8	8	4	7	2	4	3,383
2004	65	9	7	5	7	2	4	3,696
2005	63	9	8	4	8	2	5	3,788
2006	63	9	8	6	7	2	5	3,810
2007	63	10	8	5	7	2	4	3,955
2008	64	11	6	5	7	2	5	4,198
2009	64	10	8	5	7	2	4	4,133
2010	64	10	8	5	6	2	5	4,106
2011	65	9	8	6	6	2	5	4,210

#### Table 4: Provincial distribution of beds (%), 1990–2011

*Note:* Some of the provinces have been grouped and displayed to maintain confidentiality commitments to respondents.



-	Share of admissions									
Year	Western	Central	Southern	Northern	North Western	Sabaraga muwa	EP, NCP and Uva	Total number of admissions		
1990	59	12	15	1	11	1	2	100,200		
1991	58	12	17	1	10	1	1	104,700		
1992	62	11	13	1	10	1	1	111,200		
1993	62	11	12	2	10	3	2	121,400		
1994	62	9	11	2	11	3	2	124,000		
1995	63	9	12	2	10	3	2	129,800		
1996	61	9	12	6	9	2	2	140,800		
1997	62	9	11	5	9	3	2	137,800		
1998	63	10	10	4	9	3	2	141,000		
1999	65	10	9	4	9	2	2	145,600		
2000	64	10	8	3	9	2	2	145,100		
2001	67	11	7	3	7	2	2	147,900		
2002	70	11	7	3	6	1	2	160,500		
2003	71	10	6	3	6	2	2	174,400		
2004	71	10	6	3	6	2	2	183,600		
2005	69	11	6	3	6	2	3	179,200		
2006	71	9	6	3	6	2	3	197,800		
2007	72	9	6	3	6	2	3	203,100		
2008	71	9	6	4	5	2	3	220,400		
2009	72	9	7	3	5	2	2	228,300		
2010	73	8	7	3	4	2	2	257,900		
2011	73	8	7	3	4	2	3	266,000		

Table 5: Provincial distribution of admissions (%), 1990–2011

			Share	of outpatient v	isits			Total number of
Year	Western	Central	Southern	Northern	North Western	Sabaraga muwa	EP, NCP and Uva	outpatient visits
1990	63	8	22	1	6	1	1	1,115,000
1991	64	9	20	1	6	1	1	1,146,000
1992	68	7	17	1	5	1	1	1,322,000
1993	70	7	14	1	5	2	1	1,501,000
1994	71	6	13	1	6	2	1	1,630,000
1995	73	6	13	1	5	2	1	1,758,000
1996	73	5	13	2	6	2	1	1,871,000
1997	73	4	13	2	6	2	1	1,979,000
1998	76	4	9	2	6	3	1	2,248,000
1999	78	3	8	2	6	3	1	2,667,000
2000	78	3	8	2	6	3	1	2,997,000
2001	80	3	7	2	5	2	1	3,289,000
2002	80	3	7	2	5	2	1	3,544,000
2003	77	2	9	2	5	2	2	3,702,000
2004	70	3	12	3	6	4	3	3,604,000
2005	66	3	13	3	7	3	4	3,490,000
2006	66	3	14	4	7	3	3	3,482,000
2007	67	4	14	4	6	3	2	3,473,000
2008	67	5	13	4	6	3	3	3,856,000
2009	65	6	15	3	6	3	2	3,835,000
2010	65	6	16	3	5	2	3	4,372,000
2011	63	7	16	3	5	2	3	4,742,000

Table 6: Provincial distribution of outpatient visits (%), 1990-2011

			Sh	are of revenue	1			Total
Year	Western	Central	Southern	Northern	North Western	Sabaraga muwa	EP, NCP and Uva	revenue (Rs. million)
1990	80	8	7	0	4	0	1	426
1991	83	6	6	0	4	0	1	511
1992	82	7	6	0	3	0	1	612
1993	82	7	6	0	4	0	0	743
1994	82	7	6	0	3	0	0	862
1995	82	7	6	0	3	0	0	1,048
1996	82	7	6	1	3	0	0	1,247
1997	82	7	6	1	3	1	1	1,544
1998	84	6	5	1	3	1	1	1,844
1999	85	6	4	1	2	0	1	2,237
2000	87	6	3	1	2	0	1	2,662
2001	87	6	3	1	2	0	1	3,172
2002	90	5	2	1	1	0	1	4,426
2003	91	4	2	1	1	0	1	5,264
2004	91	4	2	1	1	0	1	6,540
2005	92	4	2	1	1	0	1	8,379
2006	91	4	1	1	2	1	1	9,212
2007	89	5	3	1	2	1	1	10,825
2008	91	4	2	1	1	1	1	14,172
2009	88	4	5	1	1	1	1	14,796
2010	88	4	5	1	1	0	1	17,040
2011	88	4	4	1	1	0	1	19,292

 Table 7: Provincial distribution of revenue (%), 1990–2011

			Share of	f capital exper	nditure			Total capital
Year	Western	Central	Southern	Northern	North Western	Sabaraga muwa	EP, NCP and Uva	expenditure( Rs. million)
1990	77	9	8	0	5	0	1	77
1991	80	7	7	0	4	0	1	93
1992	79	9	7	0	4	0	1	109
1993	78	9	7	0	4	0	1	131
1994	79	9	7	1	4	1	1	149
1995	79	8	7	1	4	1	1	184
1996	78	8	7	1	4	1	1	221
1997	77	8	8	1	4	1	1	261
1998	79	8	6	1	3	1	1	302
1999	80	8	5	1	3	1	1	353
2000	72	20	3	1	2	1	1	499
2001	82	8	4	2	4	1	0	505
2002	94	2	1	1	1	0	1	1,626
2003	93	2	2	0	1	0	1	2,016
2004	84	5	6	1	2	2	1	1,207
2005	79	5	7	1	5	2	1	1,250
2006	83	7	3	1	2	2	2	1,220
2007	73	11	10	1	2	2	1	1,175
2008	85	7	4	2	1	0	1	1,938
2009	83	5	9	1	1	0	1	2,647
2010	78	6	11	1	1	1	2	2,162
2011	82	7	8	1	1	1	1	3,076

Table 8: Provincial distribution of capital expenditure (%), 1990-2011

Source: IHP PHNHs database 2012

#### Size distribution

- In 2011, the majority of the 125 private hospitals in the country had bed capacities ranging from 10–19 (35%) and 20–49 (38%) (Table 9). Those with 50–99 beds accounted for 9% of all hospitals, and another 6%possessed more than 100 beds.
- Overall, there has been a shift towards building of larger size hospitals in the country. While the hospitals with more than 100 beds have increased from 3% in 1990 to 6% of the total in 2011, hospitals with less than 10 beds have reduced from 19% to 12% during the same period.
- While the hospitals that have more than 100 beds accounted for the largest share of private hospital beds (37%) in the country in 2011, hospitals with 20–49 beds accounted for approximately 31% of the beds (Table 10).
- There has been a substantial shift in inpatients treated in the larger hospitals in the country. Hospitals with more than 100 beds accounted for the largest share of admissions (54%) and outpatient visits (35%) in 2011 (Table 11 and Table 12), up from 16% and 28% for these two categories respectively, in 1990.

Year	<10	10—19	20—49	50—99	100+	Total number of hospitals
1990	19	22	43	12	3	66
1991	19	21	41	15	3	66
1992	17	25	39	15	4	68
1993	16	25	40	14	4	70
1994	11	33	38	14	4	71
1995	10	34	38	14	4	72
1996	11	32	38	14	4	74
1997	10	31	41	14	4	79
1998	10	30	44	12	4	80
1999	10	30	45	10	5	83
2000	11	32	41	10	6	83
2001	10	32	42	7	8	86
2002	11	28	45	7	9	88
2003	11	32	40	7	10	90
2004	13	29	42	8	9	103
2005	12	31	42	9	8	106
2006	13	33	38	8	7	108
2007	14	28	42	9	7	108
2008	12	32	41	8	7	119
2009	12	33	40	7	7	123
2010	12	34	38	8	6	124
2011	12	35	38	9	6	125

Table 9: Distribution of hospitals by bed capacity (%), 1990–2011

		Share of	beds by bed cap	acity		
Year	<10	10—19	20—49	50—99	100+	Total number of beds
1990	5	11	40	31	14	2,004
1991	4	10	35	38	13	2,080
1992	4	12	32	35	17	2,195
1993	4	12	33	33	18	2,275
1994	2	15	31	32	20	2,322
1995	2	15	31	31	21	2,396
1996	2	14	30	32	21	2,490
1997	2	14	33	31	20	2,629
1998	2	14	36	28	21	2,645
1999	2	14	37	23	24	2,706
2000	2	15	33	22	27	2,764
2001	2	15	35	14	34	2,823
2002	2	11	32	12	42	3,199
2003	2	13	30	11	45	3,383
2004	2	11	32	13	42	3,696
2005	2	12	32	15	38	3,788
2006	2	13	30	15	40	3,810
2007	2	11	32	15	40	3,955
2008	2	12	33	13	40	4,198
2009	2	13	33	13	39	4,133
2010	2	14	32	15	37	4,106
2011	2	14	31	16	37	4,210

Table 10: Distribution of beds by bed capacity (%), 1990–2011

		Share of ad	mission by bed c	apacity		Total number of
Year	<10	10—19	20—49	50—99	100+	admissions
1990	4	11	38	30	16	100,200
1991	4	9	37	33	17	104,700
1992	4	12	30	30	24	111,200
1993	4	13	30	30	23	121,400
1994	1	19	28	29	23	124,000
1995	1	19	28	27	24	129,800
1996	2	16	29	29	24	140,800
1997	1	17	28	28	25	137,800
1998	1	16	29	26	27	141,000
1999	1	17	27	24	31	145,600
2000	2	18	25	24	32	145,100
2001	1	16	24	11	47	147,900
2002	1	11	26	9	52	160,500
2003	1	12	24	8	55	174,400
2004	1	10	23	10	55	183,600
2005	1	10	27	15	48	179,200
2006	1	11	23	11	54	197,800
2007	1	9	24	12	54	203,100
2008	1	11	24	11	53	220,400
2009	1	10	24	10	55	228,300
2010	1	10	23	11	55	257,900
2011	1	10	21	14	54	266,000

 Table 11: Distribution of admissions by category of bed capacity (%), 1990–

 2011

		Share of outpa	tient visits by be	ed capacity		Total number of
Year	<10	10—19	20—49	50—99	100+	outpatient visits
1990	2	14	26	29	28	1,115,000
1991	3	13	24	28	32	1,146,000
1992	2	14	19	30	35	1,322,000
1993	2	14	19	31	33	1,501,000
1994	1	17	19	31	33	1,630,000
1995	1	17	18	30	34	1,758,000
1996	1	17	17	30	34	1,871,000
1997	1	17	18	29	35	1,979,000
1998	1	15	20	21	42	2,248,000
1999	1	14	19	18	47	2,667,000
2000	1	16	16	17	50	2,997,000
2001	1	15	16	8	60	3,289,000
2002	1	13	19	8	59	3,544,000
2003	1	16	17	8	59	3,702,000
2004	2	18	16	12	52	3,604,000
2005	2	19	19	18	42	3,490,000
2006	4	19	21	14	43	3,482,000
2007	3	17	24	13	43	3,473,000
2008	3	18	28	11	40	3,856,000
2009	4	15	33	10	38	3,835,000
2010	5	15	34	12	35	4,372,000
2011	4	16	30	15	35	4,742,000

 Table 12: Distribution of outpatient visits by category of bed capacity (%),

 1990–2011

#### Staffing

Most medical and dental practitioners at private hospitals worked part-time. While only 8% of the medical practitioners working at private hospitals worked full time, this was the case with 24% of the dental practitioners in 2011. There has only been a modest change in the number of such staff attached full-time to individual hospitals. The estimated number of nurses at private hospitals was approximately 4,500 in 2011 (Table 13), and most of them worked full-time.

	Doctors		Dentists	;	
Year	Part time	Full time	Part time	Full time	Nurses
1990	1,653	215	37	13	1,981
1991	1,690	214	35	12	2,060
1992	1,871	232	36	11	2,253
1993	1,928	241	38	13	2,365
1994	1,966	247	37	13	2,469
1995	2,033	251	39	15	2,588
1996	2,155	261	41	16	2,717
1997	2,215	263	42	19	2,830
1998	2,255	267	43	19	2,834
1999	2,301	271	44	20	2,845
2000	2,314	269	45	19	2,887
2001	2,328	282	47	21	2,880
2002	2,484	401	49	22	3,004
2003	2,638	411	51	24	3,047
2004	2,827	425	58	24	3,187
2005	3,068	436	64	28	3,359
2006	3,133	411	80	32	3,341
2007	3,334	396	81	27	3,461
2008	3,669	409	84	27	3,743
2009	4,158	410	87	30	4,088
2010	4,400	412	84	29	4,208
2011	4,845	424	94	30	4,514

Table 13: Estimated number of doctors, dentists and nurses, 1990–2011

#### Medical equipment and technology availability

- The total number of operating theatres in the private hospitals has more than doubled from 78 to 193, during 1990 to 2011 (Table14). Estimates for the blood banks, ambulances, X ray equipment, CT (Computed Tomography)scanners, MRI (Magnetic Resonance Imaging) scanners, mammography units and lithotripters are presented in Table14.
- The fixed equipment were more concentrated in the Western Province compared to the other provinces (Table 15), implying that the private hospital services are more capital intensive in the Western Province.
- In 2011, the private hospitals operated 13 CT-scanners and 6 MRI scanners in the country. Combined with the 22 CT-scanners and 3 MRI scanners operated by the public sector (in 2010), the overall numbers of such medical technologies in Sri Lanka remain much lower than in the OECD countries (Table 16).

Year	Operating Theatres	Blood banks	Ambulances	X-ray equipment	CT scanners	MRI scanners	Mammography units	Lithotripters
1990	78	2	17	60	2	0	0	0
1991	80	3	18	61	2	0	0	0
1992	84	4	21	67	3	0	3	0
1993	87	4	22	69	3	0	3	0
1994	89	4	24	69	4	0	3	0
1995	92	4	26	74	4	0	3	0
1996	92	4	26	74	4	1	3	0
1997	98	5	30	80	4	1	3	0
1998	99	5	30	80	4	1	3	0
1999	102	5	31	81	4	2	4	0
2000	104	6	33	82	4	2	4	0
2001	108	6	33	85	4	2	4	0
2002	116	7	38	85	5	3	5	1
2003	123	8	42	83	6	3	6	2
2004	138	8	46	90	6	3	7	2
2005	136	7	52	97	6	3	7	2
2006	136	6	55	97	8	3	6	3
2007	141	6	64	103	9	3	6	3
2008	149	6	68	111	10	3	8	3
2009	167	7	72	128	11	5	9	3
2010	177	8	81	132	11	6	9	3
2011	193	8	87	143	13	6	9	3

Table14: Medical equipment operated by private hospitals, 1990-2011

#### Table 15: Medical equipment operated by private hospitals by province, 2011

Province	Operating Theatres	Blood banks	Ambulances	X-ray equipment	CT scanners		Mammography units	Lithotripters
Western	119	8	56	84	8	6	7	3
Central	20	0	7	14	0	0	1	0
Southern	14	0	8	13	3	0	1	0
Northern	10	0	4	4	0	0	0	0
North Western	13	0	3	10	0	0	0	0
Sabaragamuwa	3	0	1	3	1	0	0	0
EP, NCP and Uva	14	0	8	14	1	0	0	0
Total	193	8	87	143	13	6	9	3

*Note:* Some of the provinces have been grouped and displayed to maintain confidentiality commitments to respondents.

Country	CT scanners	MRI scanners
Australia	43	6
France	12	7
Germany	18	10
Japan	97	43
United Kingdom	8	8
United States	41	41
Sri Lanka	2	0.5

### Table 16: Number of CT and MRI scanners per million population, 2010 (or nearest year)

Source: OECD Health Data 2012, Bio medical Engineering Services MoH and IHP PHNHs database 2012

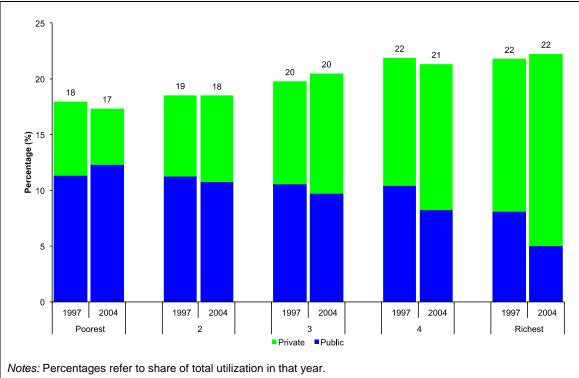
## Income differences in use of public and private services

#### **Data sources**

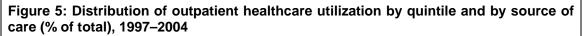
Comprehensive estimates of income differences in utilization of public and private services are only available from analysis of the Central Bank Consumer Finance and Socio-Economic Surveys. These surveys are available infrequently, but provide a picture of the general patterns and trends. The following estimates are based on analysis of the last two Consumer Finance Surveys in 1996/97 and 2003/04.

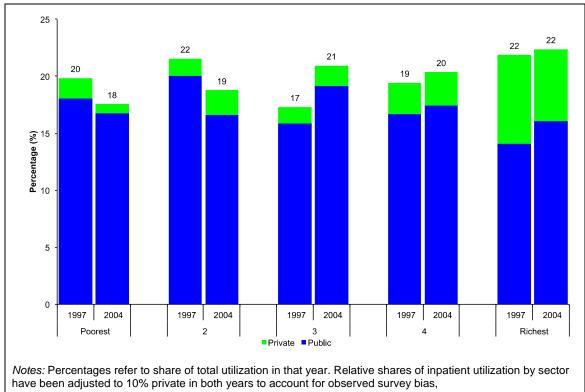
#### **Findings**

Differences of total utilization of inpatient and outpatient between two surveys by quintiles are not statistically significant at 95% confidence interval. Concentration indices show that private sector inpatient and outpatient utilization in both surveys are pro rich at 5% significant level. Public sector inpatient utilization shows pro poor trend even though it is not statistically significant. Outpatient utilization at public sector shows pro poor pattern in both surveys and it is statistically significant at 5% level.



Source: IHP analysis of the Central Bank Consumer Finance Surveys 1996/97 and 2003/04





Source: IHP analysis of the Central Bank Consumer Finance Surveys 1996/97 and 2003/04.

Figure 6: Distribution of inpatient healthcare utilization by quintile and by source of care (% of total), 1997–2004

### **3. Private Medical Insurance Schemes**

#### **Methodology**

Most insurance firms provide medical insurance as a product in their general insurance portfolio, or as a rider cover to life insurance policies. There is no requirement for insurance companies to report statistics on the operation of medical insurance schemes, unlike in some other countries. Consequently, surveys are needed to make estimates of their operations.

This report draws on the findings of the 2012 round of IHP's regular survey of medical insurance providers. The survey used the list of insurance companies available at the Insurance Board of Sri Lanka (IBSL) to identify which firms provided medical insurance policies. Of a total of 15 general medical insurance providers, 13 responded for the survey (87%) and of a total 13 life insurance providers, 11 responded for the survey (85%).

The data collected in the 2012 survey were combined with data previously collected by IHP to construct overall estimates for this sector since 1990. The estimations involve imputing for non-responses in the 2012 and earlier surveys. The estimated trends since 2000 are reported below.

It should be noted that medical insurance linked to life insurance policies is generally offered as a marketing add-on to the basic life insurance product. Therefore, the exact premium attributable for health is not distinguishable from the total life insurance premium, and insurers are often not able to accurately quantify the value of the premium that is for medical cover. When insurers could not quantify the actual values, premiums were imputed by making reference to industry averages. Hence, the estimates reported here of premiums for medical insurance offered as part of life insurance should be used with a certain degree of caution. The data indicate a comparatively large difference between the premiums charged and the actual claims for life insurance compared with the general medical insurance. This may be partly due to the already mentioned problem of inaccuracies in the reporting of such premiums, but could also be due to these products having a larger profit margin since life insurance customers may have less understanding of the relative value and cost of these rider covers.

#### Findings

#### Trends in medical insurance premiums and claims

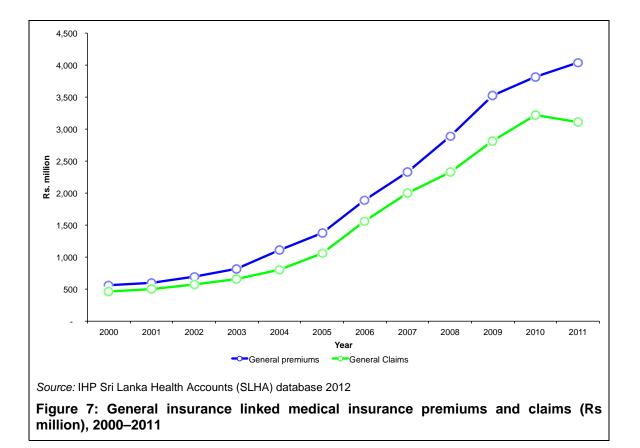
- The value of premiums and claims for medical insurance policies provided under general insurance has increased substantially, with premiums being Rs 4.0billion and claims being Rs 3.1 billion in 2011 (
- Table 17 and Figure 7). Medical insurance taken as a rider cover to life insurance (
- Table 17 and Figure 8) was associated with far less claims expenditures than general insurance.
- Most of the general medical insurance providers have caps specified on claimable health expenditure under the medical insurance policies. Limits of covers depend on the insurance scheme. Most of the insurers have set limits for room charges, consultation fees and investigation charges and also have restrictions on certain illnesses, e.g. congenital

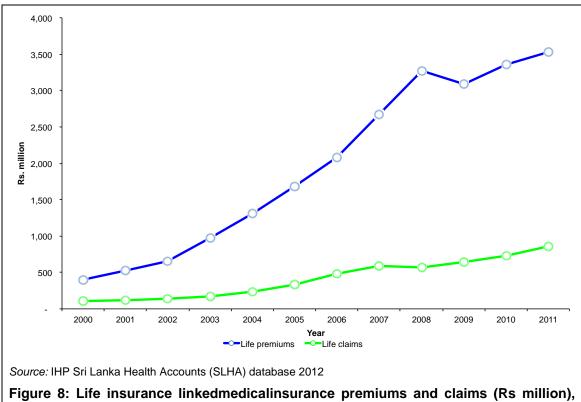
conditions, recurring conditions, pre-existing conditions etc. A few insurance providers cover medical treatment expenses incurred at selected overseas countries.

	General insurar	ice	Life insurance		
Year	Premiums	Claims	Premiums	Claims	
2000	559	459	401	106	
2001	592	497	527	119	
2002	700	575	655	145	
2003	815	659	973	177	
2004	1,109	809	1,311	234	
2005	1,377	1,056	1,682	338	
2006	1,892	1,567	2,085	483	
2007	2,335	1,998	2,670	588	
2008	2,890	2,332	3,274	565	
2009	3,525	2,819	3,095	641	
2010	3,823	3,216	3,363	735	
2011	4,043	3,109	3,535	860	

Table 17: General and life policymedical insurance premiums and claims (Rs. million), 2000–2011

Source: IHP Sri Lanka Health Accounts Database 2012





2000–2011

#### **Medicalinsurance providers**

According to IHP Sri Lanka Health Accounts Database 2012, in 2011, there were 16 insurance firms operating in Sri Lanka that provided some form of medical insurance coverage for their clients. While 15 of these firms marketedmedical insurance as part of their general insurance portfolio,13 of them did soas part of their life insurance policies(Table 18).

	Number of companies providing medical cover as part of						
Year	General insurance	Life insurance	Both insurances				
1990	5	5	5				
1991	5	5	5				
1992	5	5	5				
1993	5	5	5				
1994	5	5	5				
1995	5	5	5				
1996	6	6	6				
1997	6	6	6				
1998	6	6	6				
1999	6	6	6				
2000	10	9	9				
2001	10	9	9				
2002	10	9	9				
2003	10	10	9				
2004	11	10	10				
2005	13	12	11				
2006	13	12	11				
2007	13	12	11				
2008	13	13	11				
2009	13	13	11				
2010	15	13	12				
2011	15	13	12				

#### Table 18: Number of medicalinsurance providers, 1990–2011

Source: Insurance Board of Sri Lanka (IBSL) Annual Reports 2005–2011 and IHP Sri Lanka Health Accounts Database 2012

#### General medical insurance market structure

In 2010, the value of medical insurance premiums as a percentage of all general insurance premiums was 10.2%. There again, while 96% of these operated through group schemes, individual schemes constituted only 4%(Table 19).

	Value of medical insurance	Composition	by type of policies
Year	premiums as a share of total general insurance premiums (%)	Group schemes (%)	Individual schemes (%)
2000	6.5	96	4
2001	6.3	97	3
2002	6.0	95	5
2003	6.0	95	5
2004	6.5	94	6
2005	6.1	94	6
2006	7.3	94	6
2007	7.5	94	6
2008	8.4	94	6
2009	10.5	96	4
2010	10.2	96	4

# Table 19: Market structure of general medical insurance in terms of premiums,2000–2010

Source: Insurance Board of Sri Lanka (IBSL) Annual Reports 2005–2011 and IHP Sri Lanka Health Accounts Database 2012

# 4. Laboratories and imaging facilities

## **Methodology**

As there is no requirement for the private laboratories and imaging facilities to report on their activities to the MoH, latter did not possess a comprehensive listing of such providers, despite the requirement for all such private providers to be licensed with it.

The following estimates are based on a sample survey carried out of private laboratories and imaging facilities that are registered as private medical institution with the MoH as at January 2012, as per the requirements of the Private Medical Institutions (Registration) Act, No. 21 of 2006(Government of Sri Lanka 2006). A total of 496 private laboratories and imaging facilities had been registered with the Private Health Services Regulatory Council (PHSRC) as at January 2012. The survey targeted freestanding laboratories and imaging facilities providing services to the general public, and excluded the laboratory services provided at private hospitals.

The survey employed a stratified samplingdesign, taking into consideration the facility size and geographical location. Of a total of 149 establishments that were surveyed, 59 responded (40%) to the questionnaires that were sent out to them by the IHP.With 11 (7%) of these facilities, the questionnaires could not be delivered to the recipients, for some having discontinued operations and others having changed their locations. Five (3%) of the establishments have closed down their operations since registering. Subsequent analysis and production of overall estimates of spending used sample weights, and adjustments to reflect the response rates and non-registration with the MoH. However, the adjustment for nonregistration (33.33% overall) was based on guesstimates of the extent to which laboratories failed to be licensed.

## Findings

# Provision of services by private freestanding laboratories and imaging facilities

There are an estimated 750 freestanding laboratories and imaging facilities providing services to the general public and an estimated 129 laboratories, which includes imaging facilities (2011). The total revenue from theses facilities is approximately Rs. 7 billion, with total tests conducted being approximately 18.5 million in 2011 (Table 20).

The small laboratories/collection centres account for 86% of the total number offacilities 2011. This category does not include the branches of laboratory chains. The larger estimated revenue from the laboratories and imaging facilities has been estimated from the category of large laboratories and laboratory chains, this category includes the branch laboratories of private hospitals.

U	<b>3 0 /</b>
	2011
Total revenue (Rs. million)	6,906
Total tests conducted(`000)	18,438
Number of facilities	750
Number of facilities with Imaging	129

#### Table 20: Statistics of freestanding laboratories and imaging facilities, 2011

*Source:* IHP Private Laboratories Database 2012

#### Table 21: Free standing laboratories and imaging facilities by type, 2011

Facility type	Number of facilities	Share (%)	Revenue (Rs. million)
Large laboratories and laboratory chains	61	8	3,271
Medium laboratories	47	6	965
Small laboratories/Collecting centres	643	86	2,669

Notes:

- (1) Categorization of laboratories and imaging facilities is based on the categories applicable in registration of medical laboratories.
- (2) In general the categorization of facilities are subject to the following- laboratories which are recognized as laboratories which conducts investigations that are required for foreign employment purposes including facilities for automated testing are considered as large laboratories. Laboratories, which have automated, or semi automated testing facilities are considered as medium. The smaller laboratoriesare the ones, which carries out routine lab tests. The staff categories and numbers are also based for thecategorization of the facilities.
- (3) Branch laboratories of laboratory chains have been included in to large laboratories and laboratory chains category.

Source: IHP Private Laboratories Database 2012

#### Analysis of selected tests

The Full Blood Count (FBC), Fasting Blood Sugar (FBS), Erythrocyte Sedimentation Rate (ESR), Serum Electrolytes and Malaria Parasite were the tests selected for the analysis of cost. Among these, while the FBCs and FBSs accounted for bulk of the tests, collectively they amounted to over 7.5 million tests for the given year. The prices for the specific tests varied among different laboratories, while the cost of FBC ranged between Rs. 200 and 380,the FBS was in the range of Rs. 100–200.

#### Table 22: Price per test and number of tests conducted for selected tests, 2011

Laboratory test	Number of tests conducted (`000)	Mean Price per test (Rs.)	Range for price per test (Rs.)		
Full Blood Count (FBC)	3,048	310	200—380		
Erythrocyte Sedimentation Rate (ESR)	878	130	100—180		
Fasting Blood Sugar (FBS)	4,564	150	100—200		
Serum Electrolytes	592	460	300—600		
Malaria Parasite	240	130	100-220		

Source: IHP Private Laboratories Database 2012

# **5. Medicines supply**

## **Methodology**

The estimates of medicine supplies in Sri Lanka for 2005–09 were based on the public sector procurement carried through the Medical Supplies Division (MSD) of the MoH and the private pharmacy sales provided by the IMS-Health. Thus the following analysis presents the estimates of the overall supply of medicines, both in the public and private sectors. Both the data sources provided information on the value and volume of individual medicines distributed each year. Analysis involved coding all the medicines to their relevant WHO ATC (Anatomical Therapeutic Chemical) category.

While the MSD procurements accounts for over 95% of the total public sector purchases, the remainder consists of the local purchases carried out by the larger MoH hospitals using their own budgets. IMS Health data report sales at wholesale price by pharmacies, but excludes supply by private hospitals and dispensing doctors, which account for 10% of the private market. IMS-Health estimates also exclude sales in the Northern and Eastern provinces.

The following analysis has adjusted the total MoH purchases by 5% to account for the non-MSD purchases. The IMS-Healthdata are adjusted to the retail value by taking into account the retail price margins at pharmacies, and adjusted to account for non-coverage of sales in the North and East Provinces.

## Findings

#### Supply of medicines by private pharmacies and MoH

In terms of volume, MoH consistently accounted for more than 50% of the total drugs supplied in the country, during 2005–2009 (Table 23). When the pharmaceutical supply was analysed by ATC categories, the shares of public and private sectors were seen to be varying, and quite widely in some categories. (Table 24. Note the volumes are measured using DDCs.).

The MoH supplied greater share of drugs belonging to the categories of blood and blood forming organs, cardiovascular system, anti-neoplastic and immune-modulating agents, antiparasitic products, insecticides and repellents and sensory organs. On the other hand, the private pharmacies supplied more drugs in the ATC categories of dermatological, genito urinary system and sex hormones, systemic hormonal preparations (excluding sex hormones and insulins), musculo-skeletal system and the respiratory system.

However, despite the constant lag in volumes, the private sector accounted for three-quarters of total spending (Table 23), manifestly because the unit price of medicines in the private sector being significantly higher than the unit price paid by the MSD in purchasing.

	Year					
Description	2005	2006	2007	2008	2009	
Volume						
МоН	56.7	61.5	55.2	61.1	52.4	
Pharmacies	43.3	38.5	44.8	38.9	47.6	
Expenditure						
МоН	24.8	23.3	21.7	24.8	23.7	
Pharmacies	75.2	76.7	78.3	75.2	76.3	

# Table 23: Share of total annual medicine volumes and expenditures by sector (%), 2005–2009

Source: IMS Health 2005–2009 and MSD 2005–2009

Note: Volumes are measured using DDDs

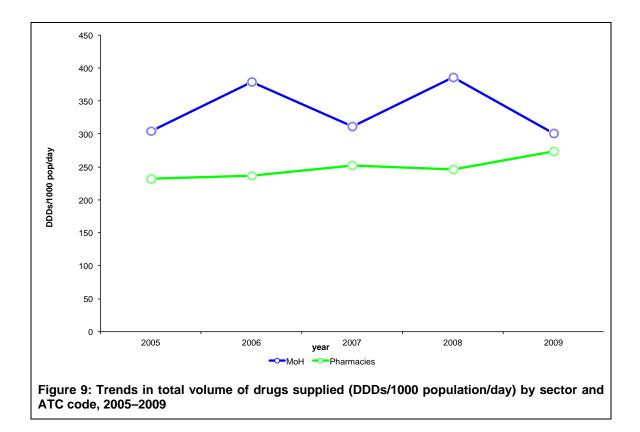
# Table 24: Share of volume of medicine in DDDs by sector (%) and ATC code, 2005–2009

			Year		
ATC code	2005	2006	2007	2008	2009
Alimentary tract and metabolism					
МоН	46.6	45.2	49.8	47.6	52.8
Pharmacies	53.4	54.8	50.2	52.4	47.2
Blood and blood forming organs					
MoH	35.5	67.6	63.4	74.4	57.6
Pharmacies	64.5	32.4	36.6	25.6	42.4
Cardiovascular system					
МоН	55.3	56.9	54.9	54.2	54.6
Pharmacies	44.7	43.1	45.1	45.8	45.4
Dermatological					
МоН	37.3	34.9	40.5	44.2	34.1
Pharmacies	62.7	65.1	59.5	55.8	65.9
Genito urinary system and sex hormones					
МоН	15.6	15.9	15.1	18.9	15.9
Pharmacies	84.4	84.1	84.9	81.1	84.1
Systemic hormonal preparations, excluding sex hormones and insulin					
МоН	43.2	41.8	42.0	37.8	28.3
Pharmacies	56.8	58.2	58.0	62.2	71.7
Antiinfectives for systemic use					
МоН	57.5	51.3	48.3	53.4	56.7
Pharmacies	42.5	48.7	51.7	46.6	43.3
Antineoplastic and immunomodulating agents					
МоН	99.7	99.7	99.4	99.4	99.0
Pharmacies	0.3	0.3	0.6	0.6	1.0
Musculo-skeletal system					
МоН	32.2	32.3	24.7	43.8	31.3
Pharmacies	67.8	67.7	75.3	56.2	68.7
Nervous system					
МоН	47.0	45.0	45.4	54.3	45.7
Pharmacies	53.0	55.0	54.6	45.7	54.3
Antiparasitic products, insecticides and repellents					
МоН	98.3	96.6	92.2	94.7	94.4
Pharmacies	1.7	3.4	7.8	5.3	5.6
Respiratory system		••••			
МоН	36.2	32.2	28.1	26.4	23.5
Pharmacies	63.8	67.8	71.9	73.6	76.5
Sensory organs	00.0	07.0	71.0	, 0.0	, 0.0
MoH	98.8	89.3	81.1	78.9	81.8
Pharmacies	1.2	10.7	18.9	21.1	18.2
Various	1.2	10.7	10.3	21.1	10.2
MoH	100.0	99.9	100.0	99.7	99.1

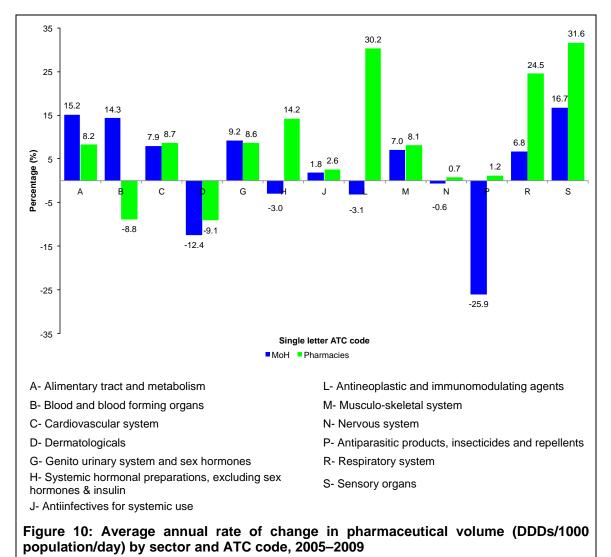
Pharmacies	0.1	0.1	0.0	0.3	0.9
Total (%)					
МоН	56.7	61.5	55.2	61.1	52.4
Pharmacies	43.3	38.5	44.8	38.9	47.6
Total (No of DDDs per day)					
МоН ('000)	5,976	7,516	6,216	7,800	6,149
Pharmacies ('000)	4,560	4,706	5,045	4,973	5,581

Source: IMS Health 2005–2009 and Medical Supplies Division (MSD) 2005–2009

A trend analysis of the total pharmaceutical volume, measured in Daily Defined Dose (DDD) per 1,000 populations per day (DDDs/1000 population/day), is presented in Figure 9. The total pharmaceutical volume of the MoH, which showed noticeable fluctuation for the years studied, did not show a clear trend when analysed across the period 2005–2009 (Figure 9). The private sector, however, records a gradual increase in the volume of pharmaceutical supplies for the same period (Figure 9).



In terms of ATC grouping, the five-year average trend in pharmaceutical volume (measured in DDDs) of the MoH indicates a positive growth for many ATC categories of drugs. This was not the case for the dermatologicals, systemic hormonal preparations (excluding sex hormones and insulin), antineoplastic and immunomodulating agents and antiparasitic products, insecticides and repellents (Figure 10). The five-year average trend in pharmaceutical volumes of the private sector showed a negative growth for the medicines under the ATC codes blood and blood forming organs and dermatologicals (Figure 10).



#### Expenditure of medicines by private pharmacies andMoH

The trend displayed by the MoH and private pharmacies in terms of expenditure incurred was significantly different to the trend of the volume of drugs supplied by the two sectors. While the MoH is the leading provider of medicines in terms of the volume, the private sector seems to be incurring more expenditure on medicines. The pharmaceutical expenditure of the private pharmacies on an average was three times higher than that of the MoH for the period 2005–2009 (Table 23).

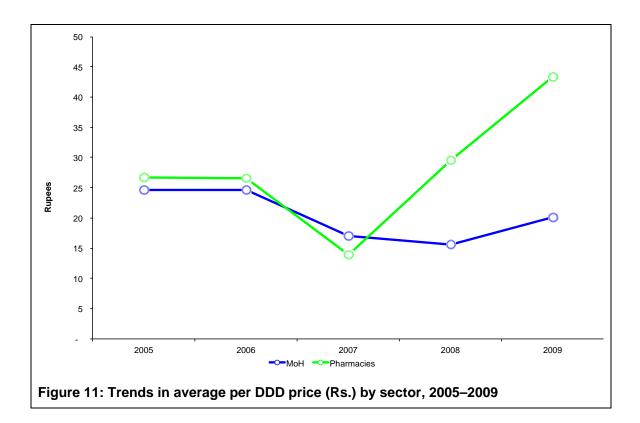
Table 25: Share of total annual medicine expenditure by sector (%) and ATC	
code, 2005–2009	

ATC and	Year				
ATC code	2005	2006	2007	2008	2009
Alimentary tract and metabolism					
МоН	18.5	18.8	16.4	17.5	18.8
Pharmacies	81.5	81.2	83.6	82.5	81.2
Blood and blood forming organs					
МоН	35.4	41.6	46.4	62.0	62.2
Pharmacies	64.6	58.4	53.6	38.0	37.8
Cardiovascular system					
МоН	15.0	12.8	12.0	10.9	11.1
Pharmacies	85.0	87.2	88.0	89.1	88.9
Dermatologicals					
МоН	15.2	9.8	14.4	13.5	9.4
Pharmacies	84.8	90.2	85.6	86.5	90.6
Genito urinary system and sex hormones					
МоН	12.6	7.5	6.7	8.8	4.2
Pharmacies	87.4	92.5	93.3	91.2	95.8
Systemic hormonal preparations, excluding sex hormones and insulins					
МоН	41.5	42.1	42.1	40.2	38.5
Pharmacies	58.5	57.9	57.9	59.8	61.5
Antiinfectives for systemic use					
МоН	41.5	37.5	37.5	43.6	43.2
Pharmacies	58.5	62.5	62.5	56.4	56.8
Antineoplastic and immunomodulating agents					
МоН	78.6	78.6	72.3	78.7	78.0
Pharmacies	21.4	21.4	27.7	21.3	22.0
Musculo—skeletal system					
МоН	9.4	9.5	6.4	13.7	7.8
Pharmacies	90.6	90.5	93.6	86.3	92.2
Nervous system					
МоН	29.1	25.5	22.9	24.8	20.1
Pharmacies	70.9	74.5	77.1	75.2	79.9
Antiparasitic products, insecticides and repellents					
МоН	13.5	11.7	9.8	10.1	14.0
Pharmacies	86.5	88.3	90.2	89.9	86.0
Respiratory system					
МоН	10.1	12.0	9.9	8.9	7.7
Pharmacies	89.9	76.7	90.1	91.1	92.3
Sensory organs					
МоН	93.7	82.9	71.8	75.2	76.3
Pharmacies	6.3	17.1	28.2	24.8	23.7
Various					
МоН	99.9	99.9	100.0	99.0	95.8
Pharmacies	0.1	0.1	0.0	1.0	4.2
Total		-		-	
МоН	24.8	23.3	21.7	24.8	23.7
Pharmacies	75.2	76.7	78.3	75.2	76.3

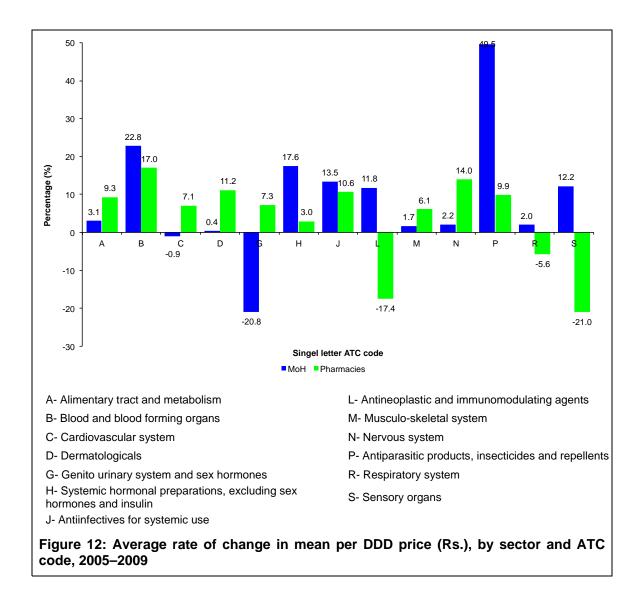
Source: IMS Health 2005–2009 and MSD 2005–2009

The expenditure on medicines incurred by the private sector was higher for all except for the ATC categories, sensory organs and antineoplastic and immunomodulating agents (Table 25). In these two categories, the MoH recorded a larger percentage of the total expenditure than the private sector. However, this could have resulted from the MoH supplying the bulk of the volume, thus, accounting to larger share of expenditure as well.

The average per DDD price for the MoH recorded a negative growth when analysed across the period 2005–2009 (Figure 11). The private sector however recorded an increase in the average per DDD price for the same period (Figure 11).

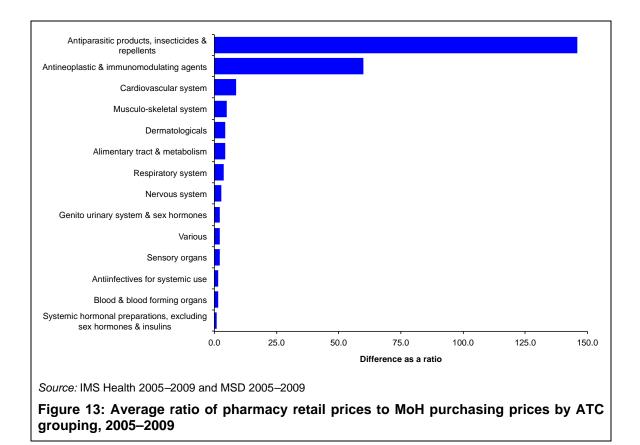


In terms of ATC grouping, the five-year average trend of the mean per DDD price of the MoH indicates a positive growth for all ATC categories except Cardiovascular system and Genito urinary system and sex hormones (Figure 12). The five-year average trend of the mean per DDD price of the private sector shows a negative growth for Antineoplastic and immunomodulating agents, Respiratory system and Sensory organs (Figure 12).



#### Price differentials of medicines by private pharmacies andMoH

In general the private sector mean prices per DDD are 1.37 times higher than that of the mean MoH per DDD prices. The biggest difference in prices is recorded in the drugs associated with the ATC categories of Antineoplastic and immunomodulating agents and Antiparasitic products, insecticides and repellents (Figure 13). In these two instances, the private sector mean per DDD prices are 60 and 146 times higher than that of the MoH prices respectively (Figure 13).



### Medicine supply compared with OECD economies

Table 26 compares the volume of medicines supplied in Sri Lanka compared with OECD economies by ATC categories for 2009. Among the countries listed below, Sri Lanka records the lowest number of DDDs/1000 population/day for all the ATC categories except for blood and blood forming organs, systemic hormonal preparations, excluding sex hormones and insulin, anti-infective for systemic use and sensory organs. The DDDs/1000 population/day supply of cardiovascular system medicines in Sri Lanka is on average about 5 times lower than other OECD countries, indicating that on an average, 42% of the population in OECD

C	2001								
Ą	č Č	ÿ	ÿ	ÿ	ÿ	ÿ	ÿ	ÿ	ÿ

Country	Year	Alimentary tract & metabolism	Blood & blood forming organs	Cardiovascular System	Genito- urinary system & hormones	Systemic Hormonal Preps ex sex hormones	Anti infectives for systemic use	Muskuloskeletal System	Nervous system	Respiratory System
Australia	2007	127.9	45.6	473.1	36.2	32.5	24.6	52.6	156.5	48.8
Belgium	2007	107.6	21.7	471.4	75.2	35.0	28.7	56.9	105.0	99.7
Czech Republic	2007	179.8	221.4	550.6	101.1	40.1	20.1	81.2	141.6	113.3
Denmark	2007	144.7	102.2	496.5	101.5	28.8	20.1	65.6	260.0	118.4
Finland	2007	293.6	136.2	517.4	129.5	42.3	22.7	97.6	248.1	128.9
Germany	2007	159.4	49.0	519.4	59.4	67.7	14.9	62.5	100.4	68.6
Greece	2004	236.4	214.7	455.5	59.1	55.3	38.7	73.8	174.1	113.0
Hungary	2006	267.6	76.7	612.8	45.2	18.8	21.4	74.8	194.6	73.8
Iceland	2008	120.8	103.4	400.4	128.4	33.0	24.2	80.7	313.8	98.4
Italy	2005	92.9	72.3	392.2	40.2	27.7	24.2	37.9	46.3	179.0
Luxembourg	2007	142.3	31.2	343.5	31.0	62.8	29.2	73.0	195.0	52.7
Netherlands	2007	172.5	116.7	427.5	53.9	23.4	12.3	39.4	112.7	180.0
Norway	2008	274.1	121.2	483.9	95.7	41.6	21.0	60.0	222.6	149.3
Portugal	2007	125.0	61.4	412.1	36.3	20.4	22.9	90.1	206.0	69.7
Slovak Republic	2008	268.3	134.1	544.8	70.6	27.5	29.2	149.1	152.9	188.4
Sweden	2008	288.3	332.7	482.1	101.2	41.3	18.8	69.0	257.5	149.3
United Kingdom	2007	168.2e	149.4e	819.4e	33.8e	33.4e	13.4e	56.1e	217.3e	64.1e
Sri Lanka- Total	2009	85.3	159.2	85.0	4.0	20.2	22.3	17.4	37.2	0.2
МоН	2009	45.0	91.7	46.5	0.6	5.7	12.6	5.4	17.0	0.1
Pharmacies	2009	40.3	67.5	38.6	3.4	14.5	9.7	11.9	20.2	0.0

Table 26: Comparison of medicines supplied in DDDs per day per 1,000 population for selected ATC categories by OECD
economies, 2009 (or latest available year)

Note: e-Estimates

Source: OECD Health data 2009 and IHP analysis for Sri Lanka.

# 6. Regulation of Private Medical Institutions

## Introduction

In 2006, Sri Lanka changed its approach to private health sector regulation by introducing a new structure that includes private sector representation in the regulatory process. This was a bold experiment, with no parallels elsewhere in the region. Prior to 2006, regulation was largely the responsibility of the line ministry, with the administrative arrangements similar to other economies with similar institutional histories and health sector development, such as Malaysia, Hong Kong SAR and Singapore. Six years of experience with this new structure show it to be fundamentally flawed in design, and completely ineffective as a regulatory approach. Improving private sector regulation will require basic changes to the regulatory system, probably emulating the developments seen in relevant health systems, such as Malaysia and Singapore.

## Legislative framework

The Thirteenth Amendment to the Constitution in 1987 shifted responsibility for regulation of private sector medical institutions from MoH and assigned it via the concurrent list to the joint responsibility of the central government and the provincial councils. Subsequently, the Private Medical Institutions (Registration) Act, No. 21 of 2006, distributed responsibility for private sector regulation further to include private medical providers, by assigning responsibility to the Private Health Services Regulatory Council (PHSRC), working in conjunction with Provincial Directors of Health(Government of Sri Lanka 2006).

The Private Medical Institutions (Registration) Act (PMIRA) has no parallels elsewhere in the region, and represents a bold experiment to reform private health sector regulation. Drafting of the PMIRA was initiated in the mid-1990s, and it was based on the thinking that a body independent of government would better regulate the private sector. Although the act was drafted in the 1990s, its passage was delayed by many years, probably due to pressure by private sector interests. However, private sector representatives argue that the previous legal arrangements were ineffective, and did not allow for private sector representation.

## **Private Health Services Regulatory Council (PHSRC)**

#### Scope of responsibility

PHSRC is an independent statutory body established by the PMIRA, and is responsible for licensing, regulating and monitoring the standards of private medical institutions. Its scope is all encompassing. Private medical institutions are defined by the Act as:

"any Institution or establishment used or intended to be used for the reception of, and the providing of medical and nursing care and treatment for persons suffering from any sickness, injury or infirmity, a Hospital, Nursing Home, Maternity Home, Medical Laboratory, Blood Bank, Dental Surgery, Dispensary and Surgery, Consultation Room, and any establishment providing health screening or health promotion service, but does not include a house of observation, Mental hospital, Hospital, Nursing Home, dispensary, Medical Centre or any other premises maintained or controlled by the State, any private dispensary or Pharmacy or drug stores exclusively used or intended to be used for dispensing and selling any drug, medical preparation or pharmaceutical product, or any Institution or premises registered for any purpose under the provisions of Ayurveda Act, No. 31 of 1961 and the Homeopathy Act, No. 7 of 1970."

#### **Composition of the PHSRC**

By design, the PHSRC gives the line ministry a minority of seats on the PHSRC, which consists of 12 ex-officio members and 16 appointed members. Under the establishing legislation, the PHSRC members represent central government, the provincial councils, the private healthcare providers, and professional bodies. Of these only six members are MoH officials or directly appointed by the Minister of Health.

The private sector members consist of representatives from the Independent Medical Practitioners Association, the Society of General Medical Practitioners, and nine representatives from the Association of Private Hospitals and Nursing Homes. A representative of the Sri Lanka Dental Association represents professional bodies and the Registrar of the Sri Lanka Medical Council represents regulatory bodies. There is also one person each appointed by Minister of Healthcare and Nutrition to represent the fields of Accountancy, Management, Law and Nursing. The Director General of Health Services (DGHS), and Director in charge of development of the Private Health Sector are ex-officio members, and represent the central government, whilst the Provincial Directors of Health Services of each province represent the provincial councils. DGHS is the chairman of the council and the Director/Private health sector development is the secretary. The 11 government sector members are a minority in the council, although there are additional five individuals representing professional interests (Table 27).

#### Table 27: Composition of the PHSRC

Members	Туре	Number
Government sector (total 11)		
Director General of Health Services	Ex- officio member	1
Director, Private Health Sector Development	Ex- officio member	1
Provincial Director of Health Services of each province	Ex- officio member	9
Professional interests (total 5)		
Registrar of Sri Lanka Medical Council	Ex- officio member	1
Representative of the field of Accountancy	Appointed by the Minister	1
Representative of the field of Management	Appointed by the Minister	1
Representative of the field of Law	Appointed by the Minister	1
Representative of the field of Nursing	Appointed by the Minister	1
Private healthcare providers (total 12)		
Representative of Independent Medical Practitioners Association	Appointed by the association	1
Representative of Sri Lanka Dental Association	Appointed by the association	1
Representative of Society of General Medical Practitioners	Appointed by the association	1
Representatives of Association Private Hospitals and Nursing Homes	Appointed by the association	9

Source: Private Medical Institutions (Registration) Act, No. 21 of 2006(Government of Sri Lanka 2006)

#### Activities and powers of the PHSRC

According to the legislation, the duties and functions of the council are:

- (i) Licensing and registration of private medical institutions
- (ii) Formulation and monitoring of quality assurance programmes for patient care in private medical institutions
- (iii) Maintenance of minimum standards for recruitment of all staff engaged or employed in private medical institutions
- (iv) Collection and publication of relevant health information and statistics Implementation of a method of grading according to the facilities offered by the respective in private medical institutions

To implement these functions, the PHSRC is given considerable powers, including the power to levy fines or imprison offenders for non-compliance via prosecution in a Magistrates Court, and the ability for its authorized officers to enter and inspect the premises of private medical institutions without prior notice. It may also advise the Minister to set forth regulations for various aspects of functioning of private medical institution.

#### Financing of the PHSRC

Under the legislation, the PHSRC is to be financed from the registration fees it collects, plus any other funds that the government chooses to allocate from its budget. The PHSRC is allocated 50% of the registration fees. The remainder of registration fees are given to the respectiveProvincial Director of Health Services (PDHS) offices based on the contributions from each province. The PDHSs may submit project proposals on private sector development activities to PHSRC and request allocation of funds for these projects,*e.g.*, training health care personnel in the private sector.

#### The registration and licensing of private medical institutions

Under the PMIRA, all covered private medical institutions must be licensed and registered with the PHSRC. Covered private medical institutions include all private hospitals and nursing homes, medical and dental clinics and offices of medical and dental practitioners, medical laboratories and imaging services, ambulances services and other private medical institutions such as blood banks.

Private health providers obtain applications to register from their PDHS or the PHSRC. The PHSRC requires providers to register according to 11 different categories, for which separate application forms and fees are specified (Table 28).

The PHSRC requires that applications for registration of aprivate medical Institution should be submitted along with other relevant documents to the council through the respective PDHS. A team at the PDHS office then checks the relevant documents and checks the institution for eligibility and compliance with minimum standards using a standard check list prepared for this purpose. The PDHS then forwards the approved application to the council with the recommendation of the PDHS. The PDHS and his team are required to inspect all private hospitals, which were not previously registered. All other private hospitals previously registered and other medical institutions are not routinely inspected unless there are complaints against those institutions. If the institutions do not qualify for accreditation, sufficient time is given to correct the shortcomings to achieve the standards required to qualify for accreditation.

Category	Registration Fee (Rs)
1. Private Hospitals and Nursing Homes	
a) 1–25 beds	20,000
b) 26–50 beds	30,000
c) 51—100 beds	50,000
d) more than 100 beds	1,000 per bed
2. Medical Laboratories	
a) Small labs/ Collecting centers	5,000
b) Medium labs	15,000
c) Large labs	50,000
3. Medical Centres/Screening Centres/Day Care Medical Centres/Channel Consultations	15,000
4. Full Time General Practices/Dispensaries/Medical Clinics/Full Time Dental Surgeries	10,000
5. Part Time General Practices/Dispensaries/Medical Clinics/Part-Time Dental Surgeries	5,000
6. Full Time Medical Specialist Practices	15,000
7. Part Time Medical Specialist Practices	10,000
8. Private Ambulance Services	10,000
9. Other Private Medical Institutions	
a) Blood banks	25,000
b) Stem cell banks	50,000

#### Table 28: Categories of private medical institutions and registration fees

c) Dental laboratories	5,000
d) Home care nursing services	5,000
e) Medial man power training institutions	20,000

Source: Gazette notification No. 1489/18 of 22nd March, 2007

The applications of private hospitals, medical laboratories, medical centres, ambulance services and other private medical institutions, such as blood banks, are evaluated by the PHSRC Evaluation Subcommittee. The subcommittee evaluates the application and informs the PDHS whether the medical institution can be registered. The PHSRC then issues the registration certificate through the PDHS. This registration is valid for one year.

#### Process of renewing of the registration

Private providers are required by the implementing regulations (*Gazette notification No.* 1489/18 of 22nd March, 2007) to renew their registration annually in order to operate. For the renewal of the registration the institutions have to submit fresh applications forms together with the specified renewal fees. Although providers are supposed to renew their registrations every year, the current practice is that the PHSRC permits established private medical institutions that have obtained registrations previously to renew their registrations even after a lapse of few years without a penalty. In these cases, the establishment would have to pay the fees due for the years they have not registered along with current years payment.

#### **Offences and Penalties**

According to the act, any registered person or body of persons who fails to comply with the provisions of the act or any regulation or rule made under the act and be guilty of an offence which involves causing injury to human life or seriously jeopardizing public health or public safety can be charged with a fine not exceeding Rs. 50,000 after a summary trial before a magistrate. In case of contravening or failing to comply with any provisions contained in any certification of registration, they can be fined not exceeding Rs. 10,000 for first offence, not exceeding Rs. 20,000 for second or subsequent offences and fine not exceeding Rs. 1,000 per each day or imprisonment not exceeding six months or both for continuing offences. A magistrate court convicting a person or body for a second offence shall cancel any certificate, authorization or permit granted under this Act.

## **Assessment of PHSRC functioning**

#### Licensing and registration

The most basic function of the PHSRC is to register and annually license private medical providers. It is also the most critical, since most of the other envisaged functions of the PHSRC, such as the establishment of periodic information reporting by private institutions, hinge on the relevant institutions being first licensed and registered.

Whilst the PHSRC has created regulations and procedures to for licensing, actual design, implementation and enforcement of the licensing function has been weak and ineffective. Its performance of the Sri Lanka PHSRC in this respect compares very badly with comparable regulatory authorities in the region, such as in Hong Kong SAR, Malaysia, Singapore and

Thailand. PHSRC performance is also deteriorating over time.

Several deficiencies can be observed.

- (i) Badly designed procedures for license application The PHSRC requires providers to register according to 11 categories, but clear and mutually exclusive guidelines on the criteria for inclusion in a particular category have not been provided, nor are any such definitions enforced in the initial verification process. Consequently, there is no consistency in the categories in which providers register, with for example many registered private hospitals not being institutions that admit patients overnight on a regular basis.
- (ii) Failure to establish system for monitoring registration status of private medical providers and requesting renewals Although the PHSRC maintains a database registry of licenses issued to providers, this database is not set up to inform the council how many providers are currently registered, nor to inform the council how many previously registered providers have renewed their applications each year. There appears to be no procedures in place for monitoring which hospitals or providers have renewed their licences each year, or for taking follow-up actions when providers fail to renew, such as sending out reminders, etc.
- (iii) Failure to take legal action against any provider for failure to obtain a license This is a serious failure, since the credibility of any licensing system depends on the belief by providers that they will face negative consequences if they fail to comply. The unwillingness of PHSRC to use its legal enforcement powers has created a situation where increasing numbers of providers see no incentive in complying.
- (iv) Declining performance in overall licensing effectiveness The majority of private medical providers who are covered by the PHSRC's ambit are not currently licensed. This includes the majority of private hospitals and presumably larger proportions of other types of medical provider. The percentages licensed appear to be declining over time.

A range of evidence indicates that most private healthcare providers do not to hold a valid and current PHSRC license. Reliable quantification of the extent of non-licensing is difficult as no reliable list of providers exists. However, reasonable estimates are possible in the case of private hospitals, since IHP's own database of private hospitals can be considered reasonably complete and comprehensive. By comparison with IHP's own database of private hospitals and inquiries made during the study, it is possible to estimate how many private hospitals were functioning in any given year, and of these how many actually obtained an annual license to operate as a private hospital from the PHSRC, plus how many institutions that registered in a given year as a private hospital were not actually private hospitals.

Table 29 presents estimates of how many institutions that have ever been registered by the PHSRC were actually functioning private hospitals. Whilst the PHSRC has cumulatively licensed 180 hospitals at least once by 2011, of those only 124 (69%) were actually functioning private hospitals. These 124 represented >95% of all private hospitals operating in the country, so the PHSRC has had some success in registering hospitals at least once. The remaining registrations reported by PHSRC were of institutions that were never or no longer operated as hospitals, or duplicate registrations, in some cases hospitals that had changed ownership (Table 30). The main discrepancy is due to outpatient facilities registering as hospitals. The problem of non-eligible providers registering as private hospitals appears to have increased over time, since the overall percentage of all registrations that were valid has been declining.

Year	Cumulative total of ever registered institutions	Cumulative valid registrations	Cumulative valid registrations (%)
2007	115	92	80
2008	153	112	73
2009	160	115	72
2010	175	122	70
2011	180	124	69

# Table 29: Cumulative valid registrations of private hospitals and nursing homes by PHSRC, 2007–2011

*Note:* Establishments that routinely admit patients for an overnight stay are considered as valid registrations. This excludes outpatient facilities.

Source: MoH registration list of private hospitals (as at January 2012) and IHP PHNHs database 2012

# Table 30: Operating status of institutions cumulatively registered by PHSRC and reasons for discrepancy with actual numbers of operating hospitals, 2011

	2011	Share (%)
Cumulative registrations	180	
Cumulative valid registrations	124	69
Inpatient facilities	124	69
Outpatient facilities	43	24
Closed down institutions	7	4
Duplicated entries in PHSRC database	6	3

Source: MoH registration list of private hospitals (as at January 2012) and IHP PHNHs database 2012

Table 31 presents a breakdown of each year's registrations according to whether they were new or renewal registrations of actual hospitals. There was an initial spate of new registrations in 2007 when the regulations were first introduced, followed by a shift in 2008 to most registrations being renewals. However, since 2009, the rate of annual renewals has fallen. This is shown more clearly in Table 32, which illustrates that the percentage of private hospitals that comply with the annual licensing requirement has fallen from 86% in 2008 to 48% in 2011.

Table 51. I fivate hospitals and hursing nomes valu registrations, 2007–2011						
Year	Licenses issued during the year	Valid registrations during the year	New registrations	Valid renewalregistrations		
2007	115	92	92	0		
2008	136	103	20	83		
2009	88	75	3	72		
2010	88	74	7	67		
2011	67	60	2	58		

#### Table 31: Private hospitals and nursing homes valid registrations, 2007–2011

*Note:* Establishments that routinely admit patients for an overnight stay are considered as valid registrations. This excludes outpatient facilities.

Source: MoH registration list of private hospitals (as at January 2012) and IHP PHNHs database 2012

Year	Estimated number of private hospitals	Valid PHSRC licenses issued during the year	Share of private hospital complying with annual licensing requirement (%)
2007	108	92	85
2008	119	103	86
2009	123	75	61
2010	124	74	60
2011	125	60	48

# Table 32: Actual share of private hospitals and nursing homes registering with PHSRC (%), 2007–2011

*Note:* Establishments that routinely admit patients for an overnight stay are considered as valid registrations. This excludes outpatient facilities.

Source: MoH registration list of private hospitals (as at January 2012) and IHP PHNHs database 2012

There are some differences in the effectiveness of annual registration by province, which may reflect the diligence of PDOHs in enforcing and monitoring private hospital licensing. Registration coverage was highest in North Central and North Western Provinces (>70%), and lowest in Uva and Northern Provinces in 2011 (Table 33). Overall annual registration in Western Province, where most of the private hospital infrastructure is located, was only 52% in 2011.

Province	Share of private hospital registering (%)	Estimated number of private hospitals	Registered private hospitals
Western	52	64	33
Central	58	10	6
Southern	49	10	5
Northern	10	10	1
Eastern	39	10	4
North Western	71	11	8
North Central	97	2	2
Uva	0	3	0
Sabaragamuwa	32	3	1
Total		125	60

# Table 33: Coverage of PHSRC registration of private hospitals by province, 2011

*Note:* Establishments that routinely admit patients for an overnight stay are considered as private hospitals. This excludes outpatient facilities.

Source: MoH registration list of private hospitals (as at January 2012) and IHP PHNHs database 2012

This poor and worsening performance by the PHSRC in exercising its most basic function can be attributed to at least three factors. First, the PHSRC lacks processes or mechanisms to track or follow-up on non-registrations or non-renewals of licences. This includes failure to maintain a registration database with ability to readily identify which hospitals fail to renew. Second, the PHSRC lacks adequate staffing to carry out these functions. Third, the PHSRC itself has adopted a policy of tolerating non-renewals, even though this involves failure to comply with the annual licensing requirements, which the PHSRC itself has established.

## Staffing

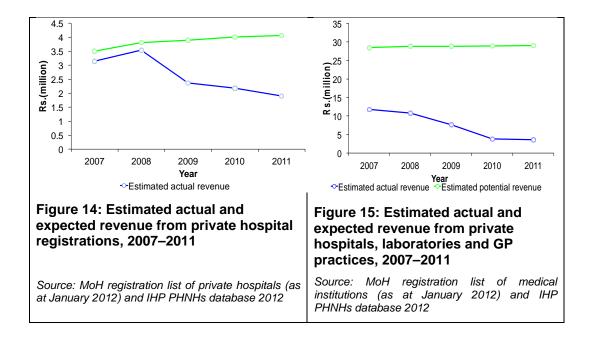
PHSRC lacks adequate staff to carry out its statutory functions. None of the PDOHs have dedicated units or staff for managing the licensing process. In practice, provincial health director's offices have only two to three officers working on this activity on a part time basis.

At the PHSRC itself, staffing is inadequate even to handle the registrations of private medical institutions. In 2012, only two people were employed on a fulltime basis, and additionally one person had been assigned temporarily from the MoH to ease out the workload. In contrast, there were six people on average working at the Private Health Sector Development Unit of the MoH during 2007–2012. In Malaysia, which has similar requirements for annual licensing of private hospitals and a similar number of such institutions 209 in 2008, the licensing unit has a staff of 62 persons, including 13 medical officers in 2010, and even this is considered by Malaysian experts to be inadequate for the task (Rosnah, Abdullah, and Lee 2011).

#### Financing

The PHSRC is intended to be self-funding from the revenue obtained from registration fees. It receives no budgetary support from the government. After an initial inflow of funds when it started licensing of providers in 2007–08, its annual revenues have fallen substantially, and currently average Rs. 12.5 million per annum. Its annual operating expenditures have averaged Rs. 13 million in 2011, so it has been able to operate by relying on current revenues and drawing down on the fund balances accumulated in 2007–2010.

This level of annual revenues is not sufficient to maintain an adequate level of staffing and resources to carry out the PHSRC's minimum functions. However, the main reason for the low revenues is its failure to enforce the annual licencing requirements imposed on private providers. **Error! Reference source not found.** shows the estimated annual revenues from licensing private hospitals if all private hospitals had been licensed each year, and the estimated actual revenues obtained from the institutions that did register as private hospitals. In 2011, the PHSRC could have collected Rs 4 million in registration fees from private hospitals if all had registered, but only collected Rs 1.9 million owing the low licensing compliance. **Error! Reference source not found.**shows the estimated funding shortfalls in revenues from licensing hospitals, laboratories and private GP clinics, having made some assumptions about the numbers of such providers in the country. In 2011, the shortfall in overall licensing revenues is estimated at over Rs. 25 million.



#### **Council meetings**

Council consist of 12 ex-officio members and 16 appointed members. Council meetings are held once a month on a fixed date every second Friday of the month. Attendance by the government sector representatives has been poor, reflecting the difficulty of PDHSs attending meetings in Colombo, given their other commitments in their home provinces. In addition, although the DGHS/MoH is supposed to chair the meetings, the DGHS has often not attended, partly owing to his other heavy responsibilities. Government representatives to represent senior officials who cannot attend in person, *e.g.*, a Deputy DGHS cannot attend in place of the DGHS. As a consequence the private sector representatives have been in the majority at most meetings, and frequently have ended up chairing meetings (Table 34).

	2007	2008	2009	2010	2011	2012
Total meetings	12	12	12	7	10	11
DGHS attendance	8	5	8	2	4	1
Meetings with public majority (%)	17	25	67	14	50	55
Meetings chaired by a public sector representative (%)	67	42	67	43	60	18

Source: PHSRCmeeting minutes

Analysis of the meeting agendas indicates that the main agenda item at most council meetings has been discussions about the efforts to improve registration. This has led to some measures such as publishing newspaper notices to inform the general public and private medical institutions about the legal requirements for registration by such institutions. It is unclear why the council has never taken other actions, such as to improving staffing, listing out and following-up those hospitals that have failed to renew in a given year, or taking legal action against providers who have failed to register or renew licences. However, there is prima facie evidence that conflicts of interest have the potential to play a role, since several members of the PHSRC work at private hospitals, which themselves failed to fully comply with the PHSRC annual licensing requirements.

Other matters that were frequently discussed at council meetings include:

- (i) Monthly updates on financial status.
- (ii) Matters referred by the Complaints Sub-committee
- (iii) In-service training programmes offered to private sector nurses this had been taken up for discussions from 2008 to February 2012 as a priority item
- (iv) Draft guidelines on complaints handling procedures during second half of 2011
- (v) Review of the registration of private hospitals, medical centres, dental practices and general practices during second half of 2011
- (vi) Discussions on how to obtain data and statistics from private hospitals for inclusion in the national health information system was discussed during several successive meetings held after August 2011.
- (vii) Development of the PHSRC website
- (viii) Issues related to the temporary registration of foreign specialists during 2012

Despite the discussion of information reporting, no system has been put in place to require private institutions, even hospitals, from reporting the most basic statistics, such as patient numbers.

#### Comparison with regulatory mechanisms in other countries

Until 2006, the legal framework for private healthcare provider regulation was similar to that in other former British colonies with similar legal traditions and mixed healthcare systems, such as Malaysia, Singapore, Hong Kong SAR and Australia. The PMIRA resulted in Sri Lanka diverting from this common regulatory experience by establishing an independent private health sector regulator outside MoH, and by allowing the private sector providers a direct involvement in the regulatory process. Comparison of the subsequent performance of private sector regulation in Sri Lanka shows that the performance and effectiveness of the PHSRC compares badly with regulatory agencies in other relevant countries. This poor performance of the PHSRC appears to be directly related to the unique features of its design.

Table 35**Error! Reference source not found.** compares some of the key features of the regulatory mechanisms in Sri Lanka and some other regional countries. The countries selected are the ones with similar institutional histories to Sri Lanka (Malaysia, Singapore, Hong Kong SAR, Australia), or with similar levels of economic development (Thailand). In Australia, regulation is a state level responsibility, so details are given for a typical state, New South Wales. Several of these countries have also successfully developed medical tourism (Malaysia, Singapore, Thailand), and target medical tourism as a lead development industry, so their regulatory mechanisms are of particular relevance to those in Sri Lanka who are concerned that private sector regulation be supportive of industry growth.

Regulatory features	Sri Lanka	Malaysia	Singapore	Hong Kong SAR	New South Wales (Australia)	Thailand
Legislative basis	PMIRA 2006 and PHSRC guidelines	Private Health Care Facilities and Services Act 1998 (Act 586) and Regulations 2006	Private Hospitals and Medical Clinics Act 1980 and Regulations 1991	Hospitals, Nursing Homes and Maternity Homes Registration Ordinance (chap 165)	Private Health Facilities Act 2007, Private Health Facilities Regulation 2010	Medical Premises Act 1998
Responsible authority for regulation	PHSRC (independent body outside MoH)	MoH (health ministry)	MoH (health ministry)	DOH (health ministry)	DOH (health ministry)	MOPH (health ministry)
Responsible authority for licensing	PHSRC (independent body outside MoH)	MoH (health ministry)	MoH (health ministry)	DOH (health ministry)	DOH (health ministry)	MOPH (health ministry)
Independence of regulatory from private sector	No – private sector part of regulator	Yes	Yes	Yes	Yes	Yes
Providers subject to regulation	Private hospitals, laboratories, medical centres and clinics, dental clinics, ambulance services, etc.	Private hospitals, medical and dental clinics	Private hospitals, medical and dental clinics, clinical laboratories or healthcare establishments	Hospitals, nursing homes and maternity Homes	Any premises at which any person is admitted or provided with medical, surgical or other prescribed treatment	Private clinics and hospitals
Requires license to operate	Yes	Yes	Yes	Yes	Yes	Yes
License must be renewed annually	Yes	No	Yes	Yes	Yes	Yes
Effectiveness of private hospital licensing	48% (2011)	>98%	100%	100%	100%	>90%
Requirements of person in charge for licensed hospital	No	Yes	Yes	Yes	No	Yes
Statistical reporting requirements of private hospitals	None	Patient morbidity and mortality by ICD-10 every three months, annual patient statistics.	Annual patient statistics by ICD-10	Annual patient statistics by ICD-10, including mortality.	Patient statistics by ICD-10, discharges, bed-days, etc. to national health statistical agency.	Annual statistical returns

As can be seen, the regulatory system in Sri Lanka is unique in several respects. It is the only country where the regulatory function is placed outside the health ministry, and the only one that permits private sector providers to be part of the regulatory agency. This latter feature deviates from basic regulatory good practice principles that require that the regulator be independent of those regulated. Like Sri Lanka, all the countries require private hospitals and other providers to be annually licensed, except Malaysia which requires private hospitals to have two licenses to start operations. However, unlike Sri Lanka almost all private hospitals in these other countries comply with annual licensing requirements. Furthermore, in all the other countries, private hospitals are required to report basic patient morbidity data on an annual basis or more frequently, unlike in Sri Lanka where no such requirement is imposed.

The comparative evidence strongly indicates that the poor performance of the regulatory mechanism in Sri Lanka is due to the relocation of the regulatory function outside MoH, and the decision to involve the private sector within the regulatory process. Although health ministries in all these countries have a history, like in Sri Lanka, of slow and delayed development of private sector regulatory mechanisms and necessary investments in them, they have all persevered with this approach, and have over time built more robust mechanisms than in Sri Lanka.

## Recommendations

The current private health sector regulatory mechanism in Sri Lanka is not working. It has proved unable to discharge even the most limited function of licensing providers. Its failure does not appear to be due to deficiencies on the part of its staff or the relevant MoH officers, but due to the basic design of the mechanism. Involvement of the private providers in the regulatory mechanism contravenes basic regulatory good practice, and must be the major reason for the ineffectiveness of PHSRC and its inability to take action to improve its performance.

Sri Lanka and the public health interest need an effective mechanism for regulation of the private sector. The following recommendations are made:

- 1) The PMIRA should be repealed, and the regulatory functions returned to MoH working in collaboration with PDHSs.
- Sufficient budget and resources should be allocated to MoH to undertake its regulatory responsibilities, with performance benchmarked against other regional countries with healthy private sector development, such as Malaysia, Singapore and Hong Kong.

# 7. Health Sector Financing

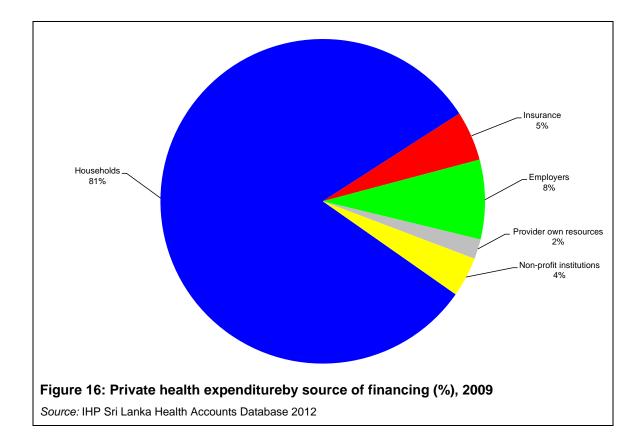
The profiling of health sector financing is based on the analysis of IHP's Sri Lanka Health Accounts (SLHA) system. The SLHA estimates national health expenditures in Sri Lanka. The objective of the SLHA activity is to track overall health expenditure flows in Sri Lanka. The SLHA framework is based on and is compatible with the *System of Health Accounts* (SHA), the statistical standard for international reporting of health accounts, published in 2000 by the OECD, and endorsed for international reporting of health accounts statistics by (WHO 2003). It accordingly uses a definition of health expenditure that corresponds to the OECD SHA concept of Total Health Expenditure (THE).

THEincludes as health spending all expenditures in categories corresponding to personal health services, collective health services, health administration and investment in plant and equipment. Not included in the THE scope are health-related expenditures, such as those for training, environmental health, research and payment of cash benefits to patients. The SLHA tracks expenditures according to the dimensions of source of funds, provider, and function, using Sri Lanka-specific classification systems based on those of the International Classification for Health Accounts or ICHA (OECD 2000). The SLHA also tracks expenditures geographically by province and district.

## Health expenditure by source

Healthcare expenditures are financed almost equally by public and private sources. The contribution of direct financing by external donors has declined from 2–3% of expenditures in the early 1990s to less than 1% in 2009; however, overall financing by external donors is greater when external financing flows via government are included. The overall balance of public and private spending has fluctuated from year to year, but has remained largely unchanged between 1990 and 2009, the public share of financing being 50% in 1990 and 47% in 2009 (Table 36).

The bulk of private health financing involves direct payments to provides by households (82%). The rest comprises expenditures by private medical insurance schemes (5%), employers (8%), private healthcare providers themselves (2%) and non-profit institutions serving households (4%) (Figure 16).



## Health expenditure by function

Table 37 and Table 38 show that the largest share of health spending is for curative care (that is the combination of inpatient and outpatient care services). This was around 45% of THE in 1990, and rose to over 51% by 2009. Of the curative care expenditure of 45% of THE in 1990, 23% of it was outpatient care and 21.9% inpatient care. During the subsequent years, the inpatient share has increased steadily. By 2009, inpatient spending accounted for 32% of THE, and outpatient spending 19%. This increasing trend parallels similar trends in OECD economies.

The second major component of spending on personal medical services is on medical goods dispensed to outpatients, which was around 24% of THE in 2009. This category mainly comprises not only sales of medicines and other medical goods from pharmacies and other retailers, but also includes medicines and other medical goods provided to outpatients in the public sector. Overall, about 82% of the expenditure to supply medicines and other medical goods to outpatients was privately financed, and mostly by household out-of-pocket spending. This category accounts only for a portion of overall expenditure on medicines in Sri Lanka's health sector. Following international reporting standards, the SLHA reports expenditure on medicines and medical supplies used for impatient care at hospitals within inpatients care.

	Total health e	xpenditure	(Rs. million)	Share of			
Year	Public	Private	Donors	Public	Private	Donors	Total
1990	6,097	5,746	352	50.0	47.1	2.9	100
1991	6,061	6,882	458	45.2	51.4	3.4	100
1992	7,682	7,766	562	48.0	48.5	3.5	100
1993	8,275	9,115	455	46.4	51.1	2.6	100
1994	8,920	10,668	60	45.4	54.3	0.3	100
1995	10,641	12,186	66	46.5	53.2	0.3	100
1996	12,191	14,200	101	46.0	53.6	0.4	100
1997	13,347	16,235	63	45.0	54.8	0.2	100
1998	18,732	18,678	111	49.9	49.8	0.3	100
1999	18,896	21,098	103	47.1	52.6	0.3	100
2000	22,520	24,254	247	47.9	51.6	0.5	100
2001	24,149	28,839	116	45.5	54.3	0.2	100
2002	26,864	36,066	141	42.6	57.2	0.2	100
2003	29,452	41,478	536	41.2	58.0	0.7	100
2004	40,343	47,612	596	45.6	53.8	0.7	100
2005	45,927	54,223	679	45.5	53.8	0.7	100
2006	57,458	62,068	620	47.8	51.7	0.5	100
2007	64,912	69,168	926	48.1	51.2	0.7	100
2008	73,040	82,181	1,294	46.7	52.5	0.8	100
2009	78,107	88,671	1,418	46.4	52.7	0.8	100

#### Table 36: Health expenditure by financing source, 1990–2009

Note:SLHA estimates of health expenditure are provisional for 2009, since work is still on going

Source: IHP Sri Lanka Health Accounts Database 2012

Note: SLHA estimates of health expenditure are provisional for 2009, since work is still ongoing

Inpatient care		care	Outpatient	care	Ancillary serv health car		Medical g dispensed patient	to out-	Prevention public hea service	alth	All other fun of health o		Capital forma health care p institutio	rovider	Total
Year	(Rs. million) Sl	(Rs. million) Share (%)		(Rs. million) Share (%)		(Rs. million) Share (%)		(Rs. million) Share (%)		(Rs. million) Share (%)		(Rs. million) Share (%)		(Rs. million) Share (%)	
1990	2,672	21.9	2.810	23.0	587	4.8	2,497	20.5	1,076	8.8	536	4.4	2.011	16.5	12,195
1991	2,996	22.4	3,295	24.6	696	5.2	3,035	22.6	1,329	9.9	519	3.9	1,523	11.4	13,401
1992	3,493	21.8	3,717	23.2	1,028	6.4	3,471	21.7	1,366	8.5	591	3.7	2,337	14.6	16,010
1993	4,241	23.8	4,205	23.6	1,102	6.2	4,385	24.6	1,509	8.5	597	3.3	1,797	10.1	17,845
1994	5,137	26.1	4,976	25.3	1,011	5.1	4,807	24.5	1,357	6.9	689	3.5	1,662	8.5	19,649
1995	5,729	25.0	5,596	24.4	1,174	5.1	5,742	25.1	1,594	7.0	738	3.2	2,308	10.1	22,893
1996	6,597	24.9	6,406	24.2	1,394	5.3	6,548	24.7	1,775	6.7	797	3.0	2,961	11.2	26,492
1997	7,536	25.4	7,138	24.1	1,597	5.4	7,700	26.0	1,705	5.8	891	3.0	3,060	10.3	29,645
1998	9,326	24.9	8,069	21.5	1,837	4.9	9,281	24.7	2,056	5.5	998	2.7	5,934	15.8	37,522
1999	10,244	25.5	8,725	21.8	2,043	5.1	9,927	24.8	2,521	6.3	1,136	2.8	5,464	13.6	40,096
2000	12,544	26.7	10,212	21.7	2,248	4.8	11,641	24.8	2,786	5.9	1,896	4.0	5,646	12.0	47,021
2001	14,092	26.5	11,513	21.7	2,701	5.1	13,442	25.3	3,226	6.1	2,406	4.5	5,661	10.7	53,104
2002	17,597	27.9	13,877	22.0	3,380	5.4	16,159	25.6	3,679	5.8	2,531	4.0	5,767	9.1	63,070
2003	19,051	26.7	15,881	22.2	3,819	5.3	17,861	25.0	4,354	6.1	2,667	3.7	7,740	10.8	71,466
2004	25,002	28.2	17,694	20.0	4,400	5.0	21,035	23.8	5,677	6.4	4,324	4.9	10,313	11.6	88,551
2005	32,125	31.9	20,927	20.8	6,115	6.1	22,493	22.3	6,238	6.2	2,701	2.7	10,109	10.0	100,829
2006	37,518	31.2	20,781	17.3	9,339	7.8	29,925	24.9	7,593	6.3	3,189	2.7	11,667	9.7	120,147
2007	44,158	32.7	24,966	18.5	10,576	7.8	30,772	22.8	8,797	6.5	3,485	2.6	12,107	9.0	135,005
2008	50,262	32.1	30,415	19.4	12,075	7.7	35,181	22.5	9,835	6.3	4,133	2.6	14,460	9.2	156,516
2009	54,236	32.2	31,797	18.9	13,594	8.1	39,665	23.6	10,835	6.4	4,879	2.9	13,026	7.7	168,196

#### Table 37: Total Health Expenditure by function (Rs million), 1990–2009

(a) Ancillary services to health care include provision of laboratory and imaging services, as well as patient transport.

Note:SLHA estimates of health expenditure are provisional for 2009, since work is still on going

Source: IHP Sri Lanka Health Accounts Database 2012

Inpatient care Year Public Private	Outpati care		Ancilla service health ca	s to	Medic good dispens out-pati	s ed to	Prevent and pul healt service	olic h	All oth function health c	s of	Capi formati health provi institu	on of care der	Tot	tal		
	rivate	Public P	rivate	Public P	rivate	Public P	rivate	Public P	ivate	Public P	ivate	Public F	Private	Public	Private	
1990	84	16	19	81	7	93	28	72	90	10	95	5	93	7	51	49
1991	82	18	17	83	7	93	29	71	91	9	94	6	86	14	47	53
1992	82	18	17	83	6	94	28	72	90	10	92	8	92	8	50	50
1993	82	18	15	85	3	97	27	73	90	10	91	9	87	13	48	52
1994	82	18	17	83	3	97	21	79	87	13	90	10	85	15	46	54
1995	81	19	16	84	3	97	22	78	87	13	91	9	87	13	47	53
1996	80	20	15	85	3	97	21	79	86	14	93	7	89	11	46	54
1997	79	21	16	84	3	97	18	82	84	16	90	10	88	12	45	55
1998	79	21	18	82	3	97	18	82	84	16	90	10	93	7	50	50
1999	77	23	18	82	3	97	19	81	77	23	83	17	91	9	47	53
2000	77	23	20	80	4	96	17	83	71	29	89	11	88	12	48	52
2001	76	24	21	79	4	96	16	84	68	32	90	10	81	19	46	54
2002	73	27	22	78	4	96	15	85	65	35	88	12	67	33	43	57
2003	71	29	20	80	4	96	14	86	62	38	86	14	69	31	42	58
2004	69	31	23	77	4	96	17	83	69	31	87	13	84	16	46	54
2005	71	29	24	76	4	96	18	82	68	32	77	23	83	17	46	54
2006	76	24	29	71	3	97	17	83	70	30	78	22	85	15	48	52
2007	76	24	29	71	3	97	19	81	72	28	79	21	86	14	48	52
2008	75	25	27	73	3	97	18	82	72	28	76	24	83	17	47	53
2009	76	24	29	71	3	97	18	82	73	27	76	24	81	19	47	53

#### Table 38: Share of Health Expenditure for each function by source of finance (%), 1990–2009

(a) Ancillary services to health care include provision of laboratory and imaging services, as well as patient transport.

Note:SLHA estimates of health expenditure are provisional for 2009, since work is still on going.

Source: IHP Sri Lanka Health Accounts Database 2012

## Annex

-	Numbe Admiss		Number of 0	Dutpatients	Share of A (%		Share of Outpatients (%)		
Year	Public	Private	Public	Private	Public	Private	Public	Private	
1990	2,459,000	100,200	28,401,000	1,115,000	96.1	3.9	96.2	3.8	
1991	2,629,000	104,700	28,635,000	1,146,000	96.2	3.8	96.2	3.8	
1992	3,024,000	111,200	36,827,000	1,322,000	96.5	3.5	96.5	3.5	
1993	3,174,000	121,400	37,384,000	1,501,000	96.3	3.7	96.1	3.9	
1994	3,204,000	124,000	34,983,000	1,630,000	96.3	3.7	95.5	4.5	
1995	2,953,000	129,800	32,106,000	1,758,000	95.8	4.2	94.8	5.2	
1996	3,339,000	140,800	37,411,000	1,871,000	96.0	4.0	95.2	4.8	
1997	3,454,000	137,800	39,468,000	1,979,000	96.2	3.8	95.2	4.8	
1998	3,791,000	141,000	41,071,000	2,248,000	96.4	3.6	94.8	5.2	
1999	3,826,000	145,600	41,305,000	2,667,000	96.3	3.7	93.9	6.1	
2000	4,015,000	145,100	43,329,000	2,997,000	96.5	3.5	93.5	6.5	
2001	4,092,000	147,900	43,434,000	3,289,000	96.5	3.5	93.0	7.0	
2002	4,032,000	160,500	45,620,000	3,544,000	96.2	3.8	92.8	7.2	
2003	3,993,000	174,400	43,632,000	3,702,000	95.8	4.2	92.2	7.8	
2004	4,009,000	183,600	41,167,000	3,604,000	95.6	4.4	92.0	8.0	
2005	4,345,000	179,200	42,483,000	3,490,000	96.0	4.0	92.4	7.6	
2006	4,463,000	197,800	41,430,000	3,482,000	95.8	4.2	92.2	7.8	
2007	4,609,000	203,100	43,074,000	3,473,000	95.8	4.2	92.5	7.5	
2008	4,898,000	220,400	45,382,000	3,856,000	95.7	4.3	92.2	7.8	
2009	5,474,000	228,300	48,782,000	3,835,000	96.0	4.0	92.7	7.3	

Annex Table 1: Number of admissions and outpatient visits for public and private hospitals, 1990–2009

Source: IHP PHNHs database 2012, Annual Health Bulletins, Medical Statistics Unit MoH and IHP Public Facility database 2011

	Admissions per bed	
Year	Public	Private
1990	51	50
1991	54	50
1992	60	51
1993	62	53
1994	61	53
1995	55	54
1996	61	57
1997	65	52
1998	69	53
1999	69	54
2000	70	52
2001	70	52
2002	68	50
2003	67	52
2004	64	50
2005	67	47
2006	66	52
2007	66	51
2008	70	52
2009	79	55

Annex Table 2: Number of admissions per bed for public and private hospitals, 1990–2009

Source: IHP PHNHs database 2012, Annual Health Bulletins, Medical Statistics Unit MoH and IHP Public Facility database 2011

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